

TOWARDS AN UNDERSTANDING OF CHILD CENTERED EDUCATION

CENTRE FOR NEWFOUNDLAND STUDIES

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MARIE WISEMAN, B.A. (Ed.)



TOWARDS AN UNDERSTANDING OF CHILD CENTERED
EDUCATION

by

© Marie Wiseman, B.A. (Ed.)

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in partial fulfilment of the requirements
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Abstract

This study sought to clarify the concept of child centered instruction. An extensive review of the literature (including the Department of Education curriculum documents from the Province of Newfoundland and Labrador) was undertaken. From this review the major features and implications for practice with respect to child centered instruction were abstracted.

A survey of primary teachers was conducted to identify teachers' perceptions of the curriculum goals, the learning environment, the educational practices and the role of the teacher in the child centered classroom. In addition the degree of congruence between teachers' perceptions of child centered instruction and the features identified in the literature was examined. The extent to which teachers perceived child centered instruction to be implemented was explored, as well as the factors perceived to be either supportive or non-supportive of this approach.

The sample for this study consisted of 43 teachers from 11 schools under the jurisdiction of the Appalachia Roman Catholic School Board situated on the west coast of Newfoundland and Labrador. Instrumentation for data collection included a questionnaire and an interview.

The findings of the study suggest that there is a high degree of unanimity among teachers regarding their perceptions

of the goals, the learning environment, the instructional strategies and the role of the teacher in the child centered classroom. Some differences were found when an analysis of variance was done using the independent variables of number of years teaching, orientation of training, grade presently teaching and class size. The majority of respondents (64%) felt that teachers are working towards a child centered approach to instruction but that to date it has not been extensively implemented. A number of factors were identified as being supportive of child centeredness. These included availability of sufficient resources, small pupil/teacher ratios, sufficient preparation time, parental involvement, professional support and positive teacher attitudes. Likewise, an absence of these factors was considered to be non-supportive of such an approach. In addition, two other factors were deemed to have an adverse effect on the implementation of child centered instruction. These were the lack of classroom physical space and a number of policies enacted by the Department of Education.

Recommendations were that the Department of Education examine the role of its authorized resources and curriculum guides in promoting child centered instruction. The need for financial assistance in purchasing resource materials, both for classroom and district resource centers, was noted. The recommendation was also made that the Department of Education provide more extensive guidelines on the role of interdisci-

plinary teaching, as well as compile a bibliography of resource material pertinent to child centered instruction.

Several recommendations regarding the nature of district level inservice were made. The suggestion was also made that the Newfoundland Teachers' Association expand the recommended materials list developed for kindergarten to include the primary grades and follow through on its recommendation regarding the set up of district class size committees.

Finally, the recommendation was made that the idea of allowing one planning day a month for primary teachers (arising out of a survey conducted by the Provincial Primary Teachers' Council), be acted upon.

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CHAPTER I

Statement of the Problem

Introduction

The path to excellence in primary education is a journey which will continue to challenge educators in the 90s. Meeting this challenge will ensure that the area of primary education remains a vital and dynamic force in our educational system.

A young child typically spends three years engaged in primary schooling. Most educators would agree that these years are crucial ones and hence it is essential to plan and organize effective learning experiences for primary age children. The primary years (Grades I-III) can in effect be termed the foundation of a child's schooling. The National Association for the Education of Young Children (NAEYC) (1989), an organization made up of over 70,000 early childhood professionals, states: "The primary grades hold the potential for starting children on a course of lifelong learning. Whether schools achieve this potential for children is largely dependent on the degree to which teachers adopt principles of developmentally appropriate practices" (p. 2).

NAEYC stresses the importance of designing instruction and classroom environments which are responsive to the differing learning and developmental needs of young children. The concept of developmental appropriateness is addressed from

two dimensions. The first dimension relates to age appropriateness and indicates there is a natural order to development. In other words, the knowledge that characterizes "typical" development can be used to devise developmentally appropriate practices. The second dimension relates to individual appropriateness and stresses that each child is unique in learning abilities, styles of behavior and experiential background. NAEYC (1989), in discussing the nature of the learning environment that would be necessary to address both dimensions, proposes that teachers should, "prepare the environment for children to learn through active exploration and interaction with adults, other children, and materials (p. 54).

One of the publications from NAEYC, Developmentally Appropriate Practices in Early Childhood Programs Serving Children From Birth to Age Eight (1989), includes a comprehensive and authoritative list of appropriate practices in the primary grades. This list, derived from a review of the work currently published by early childhood professionals, emphasizes the need for instruction which promotes the active involvement of children, experience-based learning and individualization.

NAEYC (1989) clearly articulates its support for child centered programs in the early years of a child's schooling. However, the question of whether teachers have been able to translate broad statements about such goals into classroom

practice remains relatively unanswered. In fact, to date, there is a dearth of research related to teachers' perceptions of what constitutes child centered instruction in the primary school.

Children begin primary school with enormously different levels of intellectual, physical, social, and emotional functioning. Despite their differences, all children, as the provincial curriculum document Children Learning, A Primary Curriculum Handbook (1991) claims, are in possession of "certain capabilities that can be developed and enhanced" (p. 10). One prominent feature of the contemporary literature being produced by NAEYC (1989) and NAESP (1990), the National Association of Elementary School Principals, is its focus on child centered instruction and the potential contribution such instruction has for achieving the goal of quality education. Indeed, an ever increasing number of curriculum theorists and early childhood professionals are maintaining that child centered instruction, based on what appears to be sound philosophical presuppositions, may assist with the goal of bridging the gap between how children learn and how they are taught.

Given this fact, there is a need to question, examine and reflect upon the nature of the learning environment, the instructional strategies, the goals, and the teacher's role in a child centered classroom. Certainly it is the practitioners who are in the best position to engage in such reflection.

The task of applying theories to the classroom is a monumental challenge, and data are needed on the specific features of classroom instruction that teachers consider illustrative of a child centered approach.

An abundance of research and literature has been amassed about the nature of a primary child's learning. In fact, an issue of Newsweek Magazine (April 17, 1989) completed a special report on this very topic. The article, "How Kids Learn", suggests that educators have not taken up the challenge of adopting the active, hands-on teaching strategies associated with child centered instruction. The article further suggests that the challenge has not been met because educators have been strongly influenced by cries for "basics" and high levels of achievement in standardized testing. This influence has resulted in the utilization of developmentally inappropriate practices such as the overuse of workbooks and worksheets. Kantiowitz and Wingert (1989), authors of this article, suggested that a change to a child centered curriculum may not be an easy task but that a failure to do so will put the education of young children at risk. It is during these early years that children form their first opinions about learning and school. These years are crucial ones with respect to the development of language and socialization skills. The provision of an appropriate program for young children appears to be a widespread concern. This concern is also reflected on a local level. The document, Aims of Public

Education for Newfoundland and Labrador, states that education must ensure "that all pupils master the fundamental skills of learning to the limits of their abilities" (p. 6). To assist children with the attainment of this goal teachers need both a knowledge of child development and a knowledge of the teaching strategies appropriate to the ways in which children learn.

Katz (1988) maintains that the research relevant to children's learning has many implications for classroom instructional practices. She suggests that our knowledge of how children learn is advanced beyond our actual practice. Workbooks, drill, and irrelevant exercises still consume a large amount of instructional time. Dispositions such as curiosity, creativity and cooperativeness are important to learning. Katz believes that these dispositions are learned in an environment which promotes active involvement, play and an integrative approach to learning. These features are readily identified by Schwartz and Pollishuke (1990) and Regan and Weininger (1988) as being essential features of child centered instruction. Clearly, the need for teachers to be cognizant of the factors that enhance progress towards child centered instruction is evident. The need to understand and apply frequently used terms such as active learning, play and integrative learning to classroom instruction is rapidly becoming evident.

Presently, the varying interpretations of child centered

instruction makes it very difficult to analyze research which supports the value of such instruction or even to examine research which compares one type of instruction with another. The efficacy of a child centered classroom is the subject of much discussion in the current early childhood literature. NAEYC (1989), Schwartz and Pollishuke (1990), and the province's primary curriculum handbook stress the view that teaching must be based on sound principles of learning and that such teaching is achievable in classrooms that are child centered in nature. Staab (1988) argues that classroom descriptions, the type of materials, the type and amount of teacher mediation, and evaluation strategies must all be detailed if research results are to be accurately interpreted and generalized. In reference to whole language, literacy-based and child centered instruction, Staab states: "... we need a clear understanding of what these terms mean, ever realizing that this meaning will vary in individual classes" (p. 90). A number of other authors have also alluded to the lack of clarity associated with the concept of child centered instruction.

Blenkin and Kelly (1987), in a detailed discussion of early childhood education, explore what they term an alternative view of education, namely, child centered instruction. At the heart of child centeredness, maintain these two authors, is the idea that instruction must be based on the needs and interests of the children. Blenkin and Kelly

maintain that while most primary teachers embrace the ideology associated with education as development, the task of articulating this view clearly has not always been successfully accomplished. Unless teachers can successfully accomplish this, the child centered theory will remain theory, and day-to-day classroom practices will fall short of being child centered in nature. The failure to achieve such a goal has left teachers open to considerable external criticism, criticism against which they must be prepared to defend themselves.

Regan and Weininger (1988), two authors who also contributed much towards understanding child centered instruction, echo a similar view. They stress both the importance of and the difficulties associated with developing instruction which is of a child centered nature. Regan and Weininger state:

Teachers committed to the idea that education should be responsive to children's needs, and that children should feel and be involved in their own education, are sometimes less certain of what this commitment means with respect to program design and teacher's role in the classroom. (p. 2)

Schwartz and Pollishuke (1990), two classroom teachers who have written extensively on child centered instruction, reiterate the need for teachers to have a clear understanding of what child centeredness means before they can begin to

implement child centered instructional strategies. The preface to a recent book, Creating the Child-Centred Classroom, co-authored by these individuals asks the question, "What is a child centred classroom, and what would I see if I walked into one?" (p. 1). The questions posed by these authors and concerns raised by Blenkin and Kelly (1987) and Regan and Weininger (1988) are valid considerations. First, are there specific instructional practices deemed by primary teachers to be illustrative of a child centered approach to teaching? Secondly, what is the degree of congruence between the instructional practices identified as child centered in the literature and teachers' perceptions of child centered instruction? These two questions remain largely unanswered.

Currently many changes are occurring in society. Technology is advancing at an ever increasing speed and knowledge is increasing at a phenomenal rate. The world's population is becoming irrevocably linked together by common issues. In fact many futurists refer to the "globalized society of the twenty-first century" (Knierp, 1989, p. 43). The need for learning to become a lifestyle as opposed to a skill is rapidly becoming evident. Traditionalists who are riveted to a transmission mode of teaching are being criticized for their lack of vision into the world of tomorrow. Educators must be visionaries who reflect on the curriculum afforded primary children and ask themselves if it is a curriculum which will prepare children as they leave the

twentieth and move into the twenty-first century. The curriculum espoused by the futurists emphasizes learning as an active seeking process by the child. Concerns are being expressed that our educational system is not accomplishing this objective.

Presently the province of Newfoundland and Labrador has the lowest CTBS scores in the country and the dropout rate is alarmingly high. Educators are cognizant of the fact that many problems encountered by dropouts begin in the primary and elementary grades. Low self-esteem and a sense of academic failure are two of the identifiable traits associated with the high school dropout. Most researchers agree that a negative self-concept, once developed, is difficult to change and if unchanged can have an adverse effect on learning. Soule, Drummond and McIntire (1981) state, "Self-esteem is the mainspring that slates every child for success or failure as a human being" (p. 3). A classroom that builds a supportive nurturing environment is consistently shown in the research literature to be a positive factor in enhancing the self-esteem of children. A classroom which gives children an active voice in the school curriculum also contributes significantly to the development of a positive self-concept. Glasser (1969) asserts that a positive self-concept and feelings of competency are the most important needs of children. He further maintains that the conditions conducive to these are found in classrooms where the focus is on the

learner. Pine and Boy (1977) suggest that children need to encounter success if they are to develop to their fullest potential. This success, according to the authors, is dependent upon the type of learning environment that is established. They recommend "a school environment that encourages exploration and investigation, one that applauds a child's initial steps and accomplishments" (p. 42).

The Task Force Report, Towards an Achieving Society (1989), addresses concerns regarding the mathematics and science programs in the schools of Newfoundland and Labrador. Of pivotal concern is the assertion made in this report that the province's system is in a "crisis of low expectations" (p. 2). The report cautions against the untimely nature of this decrease in expectations. Society is changing rapidly and children must be adequately prepared to function in the twenty-first century. The report bemoans the fact that textbook publishers have a strong influence on the type of curriculum delivered to the children in the province of Newfoundland and Labrador. It recommends that inservice be geared towards effective teaching strategies.

There is much in this report to consider. If the concern that instruction remains textbook bound is valid, then it may be assumed that child centered instruction as detailed in Children Learning (1991), the provincial primary curriculum handbook, does not in reality exist in our schools. If we assume the literature is correct in its presupposition that

child centered instruction provides educators with the means to achieve quality education, two needs surface. First, there is a need to identify factors that teachers perceive to be supportive of child centered instruction. Also, there is a need to identify factors teachers perceive to be hindering the implementation of this approach.

As the 1990s begin, school enrolments across the province are declining. This decline is signalling a return to the multi-age grouping strategies common in the early history of our educational system. Teachers report innumerable difficulties in coping with this experience. Often these difficulties are linked to the present graded system of our province and the practice of assigning textbooks to each grade level. The practice has begun of providing assistance to teachers who find themselves in this situation. The provincial primary curriculum guide specifically addresses the need to establish learning centers in the multi-grade class, to avoid page to page coverage of textbooks, and to employ teaching strategies such as peer tutoring and cooperative learning. Special Interest Councils of the Newfoundland Teachers' Association regularly feature sessions related to the multi-grade classroom.

In May, 1991 the National Small Schools Conference which was held in Deer Lake, Newfoundland, focused on the need to put children at the center of the educational process and for teachers of the multi-grade classroom to employ instructional

strategies that ensure that this is indeed a reality. School boards are involved in examining the literature pertinent to multi-grade instruction and collecting data on instructional approaches deemed effective for use in this particular situation. In a recent Canadian study on the multi-grade classroom, The Multi-Grade Classroom: Myth or Reality (1991), cooperative learning, curriculum integration, learning centers, and independent studies were identified as being among the most effective instructional strategies to be used in this situation.

Many of the approaches currently being advocated for use in the multi-grade classroom have been associated with child centeredness since its beginnings. A classroom where the curriculum is teacher centered, as opposed to child centered, is not viewed by educators as one which would provide optimal learning experiences for children. Research which focuses on identifying practices which are child centered in nature will have certain applications to the multi-grade classroom. Such practices will assist teachers who struggle with the task of organizing instruction for a group of children who differ not only in ability but also in age. Teaching in the multi-grade situation warrants the use of innovative strategies directed towards the ideology of teaching children how to become independent learners. A textbook curriculum of the type described in the Task Force Report would not be a solution to the unique problems of the multi-grade classroom.

Educational leaders appear to be predominantly arguing for child centeredness, supporting the concept with the following points:

1. Child centered education focuses on the interests and developmental needs of children as the basis for instruction.
2. This type of instruction places emphasis on the process of learning rather than the product.
3. It is this approach that corresponds most closely to the ways in which children learn, namely by playing, reconstructing, and manipulating.

Notwithstanding the commitment evidenced for this ideological stance, the concept lacks a certain clarity. This study, therefore, attempted to explore the concept of child centered instruction. The factors that practicing primary teachers associate with child centered instruction were studied. It is, after all, the teachers who are ultimately left with the difficult task of translating the work of educational theorists and researchers into practice. Furthermore, the degree of congruence was examined between the practices identified by teachers as appropriate to child centered instruction and those detailed in the literature. It was anticipated that such an examination would assist with the task of identifying instructional practices that are widely accepted by teachers as being child centered. An understanding of the essential characteristics of child centered

instruction is a necessary first step in the process of assessing the potential offered by this approach for instructional improvement.

Purpose of the Study

The overall purpose of this study was twofold.

First, an attempt was made to extract from the literature a comprehensive view of what the term child centered instruction means. The literature (including the curriculum documents and authorized resources of the Department of Education), was analyzed to determine whether an affirmative endorsement of child centered instruction was evident.

Secondly, an attempt was made to clarify the concept of child centeredness by involving classroom teachers in the identification of instructional practices they deem to be associated with child centered instruction.

The major objectives of this study included a consideration of the following factors:

1. A delineation of the major features of child centered instruction as outlined in the research literature.
2. A delineation of the major features of child centered instruction as outlined in the provincial curriculum documents and resources.
3. The identification of curriculum goals and instructional practices considered by primary teachers to be illus-

trative of a child centered approach to instruction.

4. An exploration of factors teachers perceive to be important to the role of the teacher in a child centered classroom.

5. An examination of teachers' perceptions with respect to the organization of the learning environment in a child centered classroom.

6. An examination of the degree of congruence between the instructional practices identified as child centered in the literature (including the provincial curriculum guides and resources), with teachers' perceptions of child centered instruction.

7. The identification of factors perceived by teachers to be adversely affecting the implementation of child centered instruction.

8. The identification of factors perceived by teachers to be supportive of child centered instruction.

Significance of the Study

The provincial primary curriculum guide suggests that primary education should "place children at the center" (p. 2) and that primary teachers should organize instruction so that it is child centered in nature. Such a view receives widespread acceptance in the early childhood literature (NAEYC, 1989; Forester & Reinhard, 1989; Blenkin & Kelly, 1987;

Schwartz, 1990). However, despite such a high level of acceptance and support the term child centeredness is open to a wide range of interpretations.

This study is exploratory in nature in that very little research has been conducted in relation to clarifying the concept of child centered instruction. Hence, it was anticipated that the study would provide valuable information on the kinds of teaching strategies, the nature of the classroom environment, the role of the teacher and the curriculum goals teachers associate with child centeredness. It was also expected that the extensive review of the literature, along with the research undertaken for this study would lead to increased understanding of the terms frequently associated with child centered instruction. Such terms include active learning, the needs and interests of children, and learning through play.

Certain instructional practices persist which seem to be in contradiction to the philosophy of child centered instruction. For example, the use of drill exercises and workbooks is cited by Kamii (1985) and Porat (1989) who express concern that their excessive use may detract from the goals of child centeredness. This study will serve to identify factors teachers perceive to be impediments to child centered instruction.

Many overtures have been made around the Province of Newfoundland and Labrador to promote child centered instruc-

tion. Primary coordinators have increased in numbers, and inservice sessions sponsored by the various school districts and special interest councils have focused on the use of learning centers, the whole language approach, manipulative aids and other concepts often associated with child centeredness. School boards, in some instances, have seconded master teachers to work with teachers towards the goal of developing child centered classrooms. This study, to some extent, will ascertain whether such measures are considered by teachers to be supporting a move towards child centered instruction. It was also anticipated that the study would shed some light on specific factors deemed by teachers to be supportive of child centeredness.

This study also has significance in that it will suggest to primary teachers instructional strategies that are child centered in nature and more applicable to the special needs child. Elkind (1981) suggests that the gap between the information gleaned from research findings and educational practices is a substantial and potentially harmful one. Elkind claims that the "at risk" child will encounter failure when forced to adapt to a uniform curriculum, a curriculum which is developmentally inappropriate. Currently the philosophy of integrating the special needs child into the regular classroom is being practiced by many school boards. In this milieu the need to provide a curriculum to meet the needs of all children becomes a priority.

A goal that assumes more importance with the changing times is the goal of educating children to become life long learners. This study is significant in that it will consider the curriculum trends outlined by the educational futurists. The dimensions of a quality primary program have long been debated by developmental theorists, psychologists, researchers, philosophers and educators. As society becomes increasingly technologically advanced, the need for effective curriculum implementation is correspondingly high.

Benjamin (1989), in his analysis of educational and societal features, reviewed a total of 209 documents ranging in publication dates from 1976 to 1987. Among necessary changes identified in the field of education, the need for activity-based learning was a recurring leitmotif.

The futurists argue that an approach that focuses on child controlled learning will be the most effective one for preparing children to meet the demands of the future. Benjamin (1989) points out that children must be given autonomy and power of choice if they are to be educated for the coming century. Benjamin also identified integrative education as a trend recognized by the educational futurists. Educational futurists argue that discrete subject areas and timetables for individual subject areas will be a thing of the past. Several futurists, among them Small (1981), recommend that teachers adopt a thematic approach as an instructional strategy. Thus, a study of child centered instruction can be

seen to be important in that it will explore the possibilities such an approach offers to achieving the goal of preparing children to live and work in the twenty-first century. Kniep (1989) states that it is vital that schools "educate today's students for tomorrow's world" (p. 43). Hence a study of child centered instruction is practical in that it may point to ways of attaining such an accomplishment.

The theoretical base developed by the present study could offer possible directions for the inservice programs delivered to primary teachers and administrators. The resulting analysis of the dimensions of child centered instruction could possibly be used by teachers and administrators to compile a profile for child centeredness. Such a profile could be beneficial to teachers who are moving towards child centered instruction. It could provide them with some practical ways to begin implementation.

The information educators have to date about children's learning points to the need for a curriculum which fosters the maximum and continuous development of children in all areas of growth including cognitive, social, emotional and moral. The need for child centered instruction is a persistent theme in the early childhood literature. Certainly the influential works of Rousseau (1780), Piaget (1962) and Dewey (1966) have long advocated such an approach. Given the amount of support for child centered instruction, educators must focus on educational practices that reflect such an approach and

should, as Elkind (1981) notes, adopt practices that embody all the latest research and the findings of developmental psychologists.

Definition of Terms

Young Children was used to refer to children of primary school age (grades one to three).

Early Childhood Education was used to refer to the development and learning experienced by children in grades one to three.

Instruction was used to refer to the learning experiences occurring within the primary school.

Limitations of the Study

The present study was undertaken in order to obtain a comprehensive view of child centered education. It was recognized from the onset that obtaining an understanding of child centeredness would be a difficult challenge but nonetheless it was considered a worthwhile project and one for which there exists a real need. Currently, child centered classrooms are being promoted by a wide body of literature including NAEYC (1988) publications and the provincial curriculum guides. Since it is the teachers who largely determine the

nature of instruction, research must begin to focus on their perceptions of what constitutes child centeredness.

One of the limitations of this study was that because of geographical and time constraints it was restricted to a specific area of the province, namely the west coast of Newfoundland and Labrador. For this reason it is not a random sample of teachers across the province and so is not necessarily representative of primary teachers as a whole.

Secondly, the sample was drawn from the primary teacher population of 11 schools (60 teachers in total) and because of the small size did not permit generalizability to the whole teaching population of Newfoundland and Labrador. However, it was felt that the findings did provide an increased understanding of child centered instruction.

A limitation relates to the interview portion of the study. From among the total sample of 43, only five teachers consented to be interviewed. This eliminated the possibility of selecting a random sample as interviewees. Perhaps this can be attributed to the fact that the interviews were scheduled for June, traditionally a busy month for teachers.

Summary

As previously detailed, this study was an attempt to provide an in-depth look at child centered instruction. More specifically, the study examined the literature pertinent to

child centeredness, teachers' perceptions of what constitutes child centered instruction, and their views regarding the factors that are supportive and/or non-supportive of this approach. The purpose of the study was also to determine the degree of congruence that exists between teachers' perceptions of child centered instruction and the features of child centeredness derived from the literature.

Its significance related to the need to clarify the concept of child centered instruction and to delineate supportive and impeding factors in translating such an approach into practice. Significance also related to a consideration of the instructional practices outlined by the futurists as being necessary to prepare children to become lifelong learners. Finally, the significance of the study was related to its importance in suggesting directions for future inservice.

The chapter concluded with a definition of terms. Some limitations in generalizability with regard to sample size and geographical limitations were pointed out.

Chapter II will present a review of the literature relevant to child centered instruction. It will begin with an historical overview and then deal with child centeredness as it relates to education as process, constructivism, theory into practice and the role of play. It will include a review of the concept of child centeredness in Department of Education curriculum documents and resources and an examination of

the concept as it relates to education for the future.

CHAPTER II
Review of the Literature

Introduction

The impetus for this research grew from the writer's concerns regarding the type of instructional practices necessary to achieve quality programming in primary education. Presently a predominant theme in the area of primary education is the subject of child centered instruction. The concept of child centered instruction did not emerge overnight. In fact, the roots of child centeredness have a long history. In an effort to examine the concept of child centered instruction, a comprehensive review of the literature was undertaken. The literature has been divided into seven major sections. Each area has been chosen because of its particular affiliation with child centered instruction. These include: (a) Historical overview of child centered instruction; (b) Child centeredness and education as process; (c) Child centeredness and the constructivist theory of knowledge; (d) Child centered education--theory into practice; (e) The role of play in a child centered classroom; (f) The concept of child centeredness in Department of Education curriculum documents and resources; (g) Child centeredness and education for the future.

Historical Overview of Child Centered Education

Rousseau (1780), a progenitor of the child centred approach to education, stated that, "education comes to us from nature, from men or from things" (p. 6). His advice to the educators of children was, "Begin thus making a more careful study of your scholars, for it is clear that you know nothing about them" (Preface). The lineage of philosophy that significantly influences the manner in which we perceive children and their learning extends far back in time. In fact, the early philosophers are among the main protagonists of what educators today label as child centered education. Entwistle (1970) reminds readers that a child centered approach to education can be linked with Plato (428-348 BC). It was Plato, cited in Entwistle, who first said, "Let your children's education take the form of play" (p. 11). Aristotle (384-322 BC) spoke of developing both mind and body. Martin Luther (1483-1546) related the function of schools to the development of the intellectual, religious, physical and social qualities of children. Comenius (1592-1670) addressed the issue of learning as an ongoing process and elaborated on the value of learning through play and learning by doing. Pestalozzi (1774-1827) focused attention on learning through discovery and sense perception. Froebel (1782-1852) claimed that all children are unique and maintained that play should lay the foundation for their education. Dewey (1892-1952)

stressed the value of play to the educational experience and wrote prolifically on the importance of children's learning through play.

Others, too, have emphasized the need for the curriculum to be child centered in nature. The Hadow Report (1931) recommends that children should be considered agents of their own learning. Montessori (1870-1952) emphasized the fact that the curriculum must originate from the child. She saw the necessity of actively involving children in the learning process. All of these views coming from the progressive theories of education have been a powerful influence in our understanding of young children's needs. The overall thrusts of these early writings embody many of the learning principles associated with child centered education as it is known today. These include the emphasis on play, active learning, and the need to educate the whole child.

In the early 1960s progressive education, stemming from the writings of the early philosophers, most prominent among them John Dewey, appeared to put child centered theory into practice. This approach placed more emphasis on children and their interests than on subject content. Progressive education, in an attempt to move away from a rigid curriculum, concerned itself with restructuring the curriculum to allow for more freedom in learning. Principles of this new curriculum included the use of child initiated activity, experiential learning, integrated subject matter, discovery learning

techniques, the teacher as a guide to learning and cooperative group work.

Idealists have also influenced the way in which the primary curriculum is viewed. Holt (1983) argued for the importance of activity and avidly criticized the schools for turning children into passive learners. Neill (1962) commented extensively on the school readiness ideology that promotes the practice of requiring children to be ready for school. Neill advocated that schools must ready themselves for children and take on the challenge of responding to the wide range of developmental and learning needs among children.

In 1967 the Central Advisory Council for Education in England released its prestigious report on primary education. This report, often referred to as the Plowden Report, contained a copious list of statements regarding the nature of young children's learning. In fact, this report remains among one of the most comprehensive studies of primary schooling. Much of the report endorsed progressive methods of education. In proclaiming that the child lies at the heart of the education process, the Plowden Report (1967) was influential in promoting the concept of open education. Unequivocally, the recommendations of this report embrace child centered education: "We are of the opinion that the curriculum of the primary school is to be thought of in terms of activity and experience, rather than of knowledge to be acquired and facts to be stored" (Recommendation 30).

Marriott (1985), in his terse summary of Plowden's ideas of children, school, and society, highlights a number of points. Among them are the changing values of society (flexibility, critical thinking, understanding and adaptability), the differing rates of development among the children, the active nature of children, education as process, and the need to make the child the major focus of the educative process. According to Marriott, the ideas set forth in the Plowden Report (1967) have innumerable implications for curriculum organization. One concept brought to the forefront in this report is the concept of matching, a concept described in detail by Harlen (1980) and advanced earlier by Bruner (1960) and Piaget (1970). In advocating the importance of matching, the report asserts the need to find a balance between past experiences and new, to match activities to the stage of development reached by the child, in brief, to use what children already know as the basis for new learning and a way to challenge them to the next level. "Children can think and form concepts, so long as they work at their own level, and are not made to feel that they are failures" (Plowden Report, p. 196).

Beyond the concept of matching, Marriott also discussed the report's call for cooperation between home and school, discovery learning, activity-based learning, a rich learning environment, and the necessity of being responsive to "spontaneity" in learning. The Plowden Report calls for a specific

type of teacher--a teacher who consults, guides, and stimulates children in their learning.

Summary

This review of the roots from which the child centered approach was popularized affirms much of the present day thinking on children and learning. The awareness that educational programs have to give consideration to the totality of children's development has evolved over an extensive period of time. Certainly the philosophical doctrines of the great educators, among them Rousseau, Comenius and Pestalozzi, stress the importance of shaping the curriculum around the needs and interests of the children. Historically, there has been a general acceptance that play must be an essential part of early childhood programs. The need to focus attention on the characteristics of children and to plan, select, and guide learning experiences that capitalize on their propensity to learn through activity has been a major thrust of the burgeoning knowledge pertinent to the early years of a child's schooling. The next section of this review will explore the concept of education as process.

Education as Process

In recent years an avalanche of writing has focused on the concept of education as process. The ideology of process

education is certainly not a new one. In fact this view of education has, as its foundation, the roots of progressive education. Both the Hadow Report (1934) and the Plowden Report (1967) contained sentiments similar to those currently voiced by supporters of education as process.

The proponents of education as process propose the need to shift away from a strictly subject-centered curriculum and move to a curriculum which is child centered in nature. They view knowledge not as an end in itself, but as a means to an end. The advocates of education as process hold that knowledge is tentative and challenge the view that there is an indispensable body of knowledge to be taught. They argue for a curriculum which evolves out of the needs and interests of the child, is integrated in nature, considers learning a lifelong process and provides for the development of the whole child.

The process view of education is not easily explicable, yet several educators have been instrumental in bringing this concept to the forefront of educational thinking. Feeney and Christensen (1979) used the term "process-centered" to refer to "educational programs in which learning is an ongoing process of exploring and questioning ..." (p. 36). These educators suggest the need for a congruence between what teachers do in the classroom and the nature of children's learning. They identify four assumptions about children as learners. The first of these assumptions centers on the

notion that children are intrinsically motivated to learn; secondly, development is concerned with the whole child; thirdly, children are independent learners; and finally, experience is vital to children's learning. Based on the previously mentioned assumptions, Feeney and Christensen identify a number of curriculum practices illustrative of process-centered education. These include a curriculum based on the needs and interests of the learners. The authors also emphasize the need for the curriculum to be built around children's experiences. The need to provide opportunities for child initiated activities, effective use of time, space and materials is also stressed.

Blenkin and Kelly (1988), more recent propagandists of education as process, identify the key elements of this approach for early childhood educators. These can be summarized as follows:

1. Given that knowledge is subject to an evolutionary process, education must become a process of "learning how to learn".
2. The child must be actively involved "with the content and processes of his or her learning ..." (Blenkin & Kelly, 1988, p. 12).
3. Curriculum must be relevant to the child--it must be based on needs and interests.
4. Teachers are facilitators and collaborators in the learning process.

5. Both the affective and intellectual domains are important in curriculum planning.

The process view of education maintains that the process of learning is infinitely more important than the end product. The primary focus of any educational program for young children should be on the activity of the children and not on the end products of their activity. It is the manipulating, the exploring and the experimenting that children engage in as they search for answers and construct knowledge that needs to be emphasized. In other words, the focus must be on how the children are learning and not on the end results. Supporters of a process view of education do not disregard the role of knowledge in the educative process. Instead, they hold a specific view of knowledge. Blenkin and Kelly (1987) clarify this view for educators by stating that education does not mean a transmission of predetermined knowledge content. Instead, the content of education "... must be selected according to and tailored to meet the unique needs of each individual child" (p. 255). That is to say, the initiative for learning must come from the child. Teachers must facilitate this initiative to learn by basing curriculum on experiences that are relevant to the learner's life. In this view product is relegated to secondary importance. The child's needs and interests are seen as pivotal to a process-oriented curriculum. According to Blenkin and Kelly, child centeredness implies that "... the child and his or her development

are the first consideration in educational planning, and that all else is secondary to that" (p. 8).

Summary

The brief overview of the literature emerging from the process view of education reveals a special emphasis on learner centered education. Two central issues of the education as process view can be identified. The first issue clearly centers on the need to be more concerned with the process of learning than with particular bodies of knowledge. Of course, this view does not dispel the importance of knowledge but it does come from the perspective that it is the engagement of children in an active way with ideas that fosters development. The second issue clearly centers on the different curriculum needs and interests of individual children. The process view of education calls for educators to rethink their concept of primary education and to broaden their approaches to respond to the diversity of needs and interests among young children.

Child Centeredness and the Constructivist Theory of Knowledge

Bruner (1986) reminds us of the need to examine models of the learner as a basis for the improvement of children's learning. In this light, no review of the literature relevant

to child centered education would be complete without an in-depth examination of the constructivist theory of knowledge. Lochhead (1985), in his discussion of new developments in the educational field, describes the constructivist view of knowledge in a concise but comprehensive manner. Central to constructivism is the belief that children construct their own knowledge through a process of exploring, trying things out, and making errors. More precisely put, "... knowledge is not an entity that can be transferred from those who have to those who don't" (Lochhead, p. 4). In identifying issues pertinent to constructivism, Lochhead identifies four aspects of the theory he considers to be relevant to the education of young children. The first issue focuses on the idea of unlearning and the challenges presented by such a task. The suggestion is made that the novice learner comes into new situations with a variety of concepts already formed. It is for this reason that children should not be regarded as blank slates who passively receive information. To the contrary, children should be viewed as individuals who construct their knowledge of the world for themselves. Through education the novice learner begins to relate new experiences to old and in the process moves toward what Lochhead terms an expert. As he states: "They always assimilate what they are told and shown to what they already believe" (p. 6).

A second issue revolves around the construction of intermediate states. That is to say, there are stages in the

learning process where learners cannot be characterized as either novice or expert and so there is a reason for teachers to be involved in bridging the gap between the novice and the expert level. The third issue centers on the importance of giving consideration to the role of errors in learning. Errors must be viewed as a natural part of the learning process.

"We need to provide students with ample opportunity for error, because it is only by making (and recognizing) errors that real conceptual learning is possible" (Lochhead, 1986, p. 6). Forester and Reinhard (1989) reiterate this position and suggest that errors should be regarded as "stepping stones to further learning" (p. 245). The final issue examines the significance of getting children to reflect on their learning. Simply put, children should be permitted to pursue their learning by engaging in a wide range of activities and explorations. It is this active behavior on the part of children that ensures that learning takes place. The teacher should act as a collaborator with the children, enhancing their learning and moving them towards higher levels of thinking.

Blais (1988), in his account of constructivism, relates a view similar to the one expressed by Lochhead (1985). Blais describes education "... as a process designed to transform a novice learner into an expert" (p. 2). The main thrust of constructivism, asserts Blais, is its proposed view of

knowledge. "Knowledge is something the learner must construct for and by himself" (p. 3). Blais details the distinctions made by the constructivists between information and knowledge. Information is essentially that which is given to children by telling--a feeding of facts. In contrast, knowledge is an entity which cannot be presented in a concise or sequential manner, instead it must be constructed through direct active experiences. It is the latter which transforms learners into experts. Blais places constructivism high on the list of learning theories and postulates that it has the potential to revolutionize the teaching process: "... constructivism offers hope that educational processes will be discovered that enable students to acquire deep understanding rather than superficial skills" (Blais, 1988, p. 4).

In a discussion of constructivism, particularly a discussion of its applicability to primary education, the name of Jean Piaget certainly cannot go unmentioned. Piaget (1962) in his prolific writings and research work has provided valuable insights into the learning processes of children and in doing so has provided strong support for the constructivist theory of knowledge. Piaget concerned himself with the task of discovering how knowledge develops in children. One of Piaget's major contentions centers around the idea that knowledge is constructed over a period of years, it is not something to be imposed on a learner. In other words, children should not be expected to remain passive recipients

of information, instead they should be active in the construction of knowledge. Piaget firmly believed that children should be provided with ample opportunities to make discoveries from their own first-hand experiences.

Piaget (1962) identified four factors associated with the construction of knowledge. These include maturation, physical experiences with objects, social interaction and equilibration. Piaget uses the term maturation to refer to the series of stages in development, stages which are built on prior stages, each stage a prerequisite for the other. Children's own activity propels them through the stages. Furthermore, while these stages emerge in a definite order, they cannot be assigned a specific chronological order. Physical experience refers to the manipulating and exploring of objects in the environment. Despite the fact that these experiences are generally unguided they remain vital to the process of acquiring concepts such as size, order, mass and length. Social interaction is also an active process and is responsible for the acquiring of social arbitrary knowledge. This knowledge refers to the type of knowledge a child cannot discover alone. It comes from parents, the school and from society in general.

The final factor that Piaget (1969) relates to the intellectual development of children is equilibration. It is this process of equilibration that is responsible for maintaining the balance among the other three and for ensuring

that all factors operate together in a manner that ensures the growth of knowledge. Like the previous three processes, children are also active in this process. Linked to equilibration are the processes of assimilation and accommodation. Assimilation refers to the process whereby children seek to link new information to what they already know. Accommodation comes into focus when children are unable to link new learning to past experience. When this happens the child is placed in a state of disequilibrium and becomes acutely aware of the need to eliminate contradictions by modifying his/her ideas. In the drive to restore equilibrium, egocentric behavior is reduced as children begin to encounter viewpoints other than their own. Such experiences provide children with the basis for the development of thinking which is systematic and logical in nature.

Implicit in Piaget's (1969) view of how children construct knowledge are many educational implications. While Piaget himself is not an educator, many writers have provided interpretations of Piaget's work for educators. While it is not feasible to look at these interpretations in-depth, the points made by several writers are worthy of consideration.

Wadsworth (1978), in his attempt to make Piagetian theory relevant to education, identifies six principles of teaching emanating from Piaget's theories. These are enumerated below:

1. The provision of a learning environment in which children are actively engaged in selecting and initiating

activities.

2. The need for a distinction to be made between the three types of knowledge--physical, logical mathematical, and social arbitrary.

3. The recognition that error is important to understanding how children think and to discovering the level of functioning reached.

4. The need to recognize that interaction with peers is the way in which some types of knowledge are learned and to set up the learning environment in accordance with this notion.

5. The need to view logical mathematical, physical, and social arbitrary knowledge as an inseparable whole.

6. The need to recognize that direct teaching and reinforcement should be used only when there is a justifiable basis for doing so e.g., pointing out to children that the throwing of snowballs during recess time is a potentially dangerous activity.

Wadsworth (1978) also addresses the important role of the teacher in structuring a learning environment in which activity-based learning is promoted, where children select activities of interest, and where the teacher assesses children's learning through the observations of children's actions and words.

Clements (1986) also provides a list of guidelines for teachers based on the constructivist theory advanced by

Piaget. These include:

1. The use of high level questioning.
2. The encouragement of high levels of peer interactions.
3. The suggestion that teachers engage children in discussions to develop their awareness of problem solving strategies.
4. The suggestion that children be encouraged to find the answers for themselves.
5. The need to engage children in self-initiated activities for about half of the time.

DeVries and Kohlberg (1987), two writers who profess to be heavily influenced by the work of Piaget, have written extensively on the constructivist view of education. In their publication, Constructivist Early Education: Overview and Comparison With Other Programs, the authors attempt to provide direction on how Piaget's theories can be translated into educational practices. DeVries and Kohlberg call attention to the fact that constructivist teachers are needed in the field of early childhood education if the constructivist ideology is to permeate educational programs.

In terms of the teacher's role, DeVries and Kohlberg (1987) provide specific guidelines as to what this role entails. First, the suggestion is made that teachers accept error as a natural part of learning and move away from a focus on transmitting information to one in which the focus is on

understanding how the children construct knowledge. Secondly, teachers need to move away from providing extrinsic rewards and focus on the idea that "... the child learns through the motivation of interest" (DeVries & Kohlberg, p. 376). Finally, the teacher must move away from a focus on obedience and shift to a focus on positive guidance techniques or as so eloquently phrased by the authors, the teacher must become "... a companion and a guide who expresses respect for children" (p. 377).

In summary, a constructivist teacher must give priority to devising activities and creating a classroom which provides opportunities for developing reasoning and autonomy in children. Like the supporters of education as process, DeVries and Kohlberg also stress the importance of not eliminating subject matter, but maintain that teaching begins "... not with subject-matter analysis, but with child-analysis, with thinking about how children think about subject matter" (p. 381). The authors take exception to many of the current curriculum materials developed for early childhood and suggest many of them are out of the realm of children's reasoning. Instead, they focus on the need to develop content which is based on children's interests, and which in turn has the potential to inspire children's constructive activity.

Summary

Primary teachers entrusted with the responsibility of

planning the educational experiences of young children must be extremely knowledgeable about how young children develop and learn. At the same time they must be fully cognizant of the purpose of education. In the Aims of Education for Newfoundland and Labrador, education is described in the following manner: "Education is the process by which human beings are enabled to achieve their fullest and best development both as private individuals and as members of human society" (p. 3). The understanding of how children learn will provide the framework for developing a curriculum which ensures that all children will reach their potential. Certainly, from the constructivist theory primary educators can extrapolate many principles relevant to the "how" of children's learning.

Clearly, the constructivist theory of knowledge points to the necessity of understanding the means by which young children come to acquire knowledge. If children learn in the manner outlined by the constructivist theory of knowledge, then educators must seek to find ways in which children can be placed at the center of their own learning, ways in which children can be provided with opportunities to explore and to become active participants in their own learning. Teachers must devote their energies to finding ways to assist children with the tasks of becoming independent learners, and to understanding just how children learn. The rote learning of facts must be dispensed with and teachers must move towards becoming constructivist teachers. The constructivists

acknowledge that this move will ensure the highest quality of learning for young children and also ensure that instruction becomes child centered in nature.

Child Centered Education--Theory Into Practice

It is one thing to espouse child centered programming and another to translate the salient features of this concept into coherent curriculum practices. In light of this, the following section of the literature review will examine the practical applications of child centered theory to the reality of the classroom. The role of the teacher, the nature of the learning environment, the curriculum goals and the instructional practices as they apply to the implementation of child centered education will be described in detail. Consideration will first be given to the curriculum goals in a child centered classroom.

Curriculum Goals

Bos (1991), in a recently televised production of 20/20's Wild About Learning, stresses the point that educators must focus on children and in the process take on the challenging goal of getting school ready for them. Bos argues that educators must dispense with expressing the view that children need to be ready for school. The National Association of Elementary School Principals (NAESP) (1990), in addressing the

standards for education in kindergarten through eighth grade, identifies a number of goals that are significant in achieving a curriculum that is responsive to the needs and abilities of individual children. Among them are:

1. The development of basic skills in reading, writing and mathematics.
2. The development of effective communication skills.
3. The development of positive self-concepts in the children.
4. The development of a sense of self-motivation and enthusiasm for learning.
5. The development of knowledge and understanding in areas of science, social studies, fine arts, health and physical education.

NAEYC (1987) also identifies a number of primary program goals reflective of a curriculum that recognizes the individual interests and abilities of children. These include:

1. A curriculum designed to promote a sense of self-worth, personal motivation and an appreciation for learning among individual children.
2. A curriculum which recognizes and promotes the value of differentiated curriculum--the need to begin where the child is.
3. A curriculum accepting the wide range of learning styles and rates.

Children Learning, the provincial curriculum guide, also

lists a number of goals it considers to be appropriate to a child centered curriculum. The goals are noted below:

1. Help children develop a sense of self-esteem.
2. Help children acquire basic skills and knowledge to the best of their ability.
3. Help children develop reasoning, thinking, and problem-solving skills.
4. Help children develop a sense of tolerance, respect and social responsibility.
5. Identify children with enrichment and remediation needs.
6. Assist children with the challenge of becoming self-directed learners.
7. Help children identify connections between the curriculum and their immediate environment.
8. Integrate subject areas but also provide for specific subject instruction.
9. Promote learning through the thematic approach, resource-based approach, variety of classroom groupings excluding fixed ability grouping, supportive learning environments, and the learning center approach.

Schwartz and Pollishuke (1990) write that one of the primary goals of a child centered curriculum is to develop the skill of self-directed learning among children. This can be achieved by encouraging children to develop their decision-making and problem-solving skills. Many of the goals cited in

the previous sources are similar in purpose. Most are concerned with the need to focus on the goal of educating the "whole child"--physically, emotionally, socially, and intellectually. Many focus on the goal of teaching children how to learn. A discussion of the nature of the learning environment in the child centered classroom will ensue.

The Nature of the Learning Environment

Much of the early childhood literature suggests that a child centered classroom, because of the nature of instruction occurring within its walls, must be designed in a way that facilitates activity-based learning, allows for ease of movement, and permits children to consult with one another. The question of how to organize the classroom to promote child centeredness will be addressed in the following section.

NAEYC (1987), Forester and Reinhard (1989), Schwartz and Pollishuke (1990), all recognize the importance of the classroom environment in achieving the goals of child centered instruction. Children Learning (1991), the provincial curriculum handbook, reminds readers that the establishment of an environment conducive to such instruction involves many considerations and components. Among the factors to consider in regard to the learning environment are the physical space, the furniture, equipment, supplies, and instructional resources. To borrow a phrase from two classroom teachers, namely, Forester and Reinhard, teachers need to create a

"climate of delight" (p. 17) which will reflect or fit the ways in which a growing body of research suggests that young children learn best. In short, they call for an environment which fits the learners' ways. The aforementioned authors envision a classroom environment in which children move about and locate their own working places. Indeed they identify sharing and interaction as two of the most important components in building a climate of delight. From the perspective of these two authors there are many indicators teachers can use to reflect upon the nature of the learning environment in their classroom and evaluate for themselves the degree to which they have attained an atmosphere that is child centered in nature. While this list is too lengthy to provide in its entirety, a number of key points will be noted, among them:

1. Children being free to go to the bathroom, library, or office on their own.
2. Children not getting out of line or becoming distracted from tasks if the teacher is engaged in outside tasks for a moment or two.
3. Parents moving in and out of the classroom.
4. Children assuming independence in selecting activities.
5. A teacher who is joyful and enthusiastic.
6. A minimum number of classroom rules, all of which have been discussed with the children.
7. Discipline strategies which include having children

work out their differences among themselves.

8. A teacher who works beside children as they engage in projects.

9. Children visiting places within and outside the school.

10. A teacher who overlooks behaviors such as tattling and occasional disruptive behavior in favor of modeling appropriate behavior.

Schwartz and Pollishuke (1990) hold the view that there are innumerable strategies and techniques at the disposal of teachers desiring to create a learning environment that is child centered in nature. These authors maintain that the child centered classroom must be rich in resource, that are both available for use by the children and encompass the different developmental levels of children. Such resources include books, mailboxes, felt boards, puppets, materials from the child's environment (telephone directories, catalogues, newspapers and magazines). It is suggested by Schwartz and Pollishuke that teachers include both permanent e.g., listening and reading, and non-permanent e.g., water, mapping and puppetry centers, in their classroom. It is these learning centers that would provide challenges for children with varying capabilities and interests. The idea of a whole group meeting area as well as an area where children can work alone is discussed. The inclusion of classroom resources such as science materials that are open-ended is also proposed.

Clemens (1983) offers the suggestion that the physical arrangement of the classroom be such that free movement occurs with ease. With regard to seating arrangements within the classroom, he advocates that "neither teacher nor child has a particular location" (p. 22). When discussing classroom displays, Clemens talks about the importance of placing displays of original drawings, stories, and other work produced by the children both on the classroom wall and in the corridor. The idea of displaying commercially reproduced drawings that have been colored by the children is rejected outright.

NAEYC (1987) dispels the notion that the learning environment of a child centered classroom is one in which chaos reigns. Instead, they stress the fact that the tone and decorum of the classroom should exemplify orderliness. Limits need to be set on children's behavior e.g., children must learn to select another learning center if their first choice already has the designated number of participants. Staab (1981), in a discussion of the child centered classroom, recommends that teachers organize classrooms around thematic centers.

Popoff (1990) describes the child centered environment as an "active, busy environment" (p. 31). Similar to Schwartz and Pollishuke (1990), and Forester and Reinhard (1989), this writer focuses on freedom of movement, flexible grouping patterns based on interests and educational purposes, child

choice, and both the teacher and child being respectful of individual differences as essential features of the learning environment in child centered classrooms.

Taylor and Valerie (1990), in writing about the learning needs of children, suggests that the environment must be such that it "allows the child freedom to interact with materials, peers, and a teacher who understands the children's need for space, materials and time to play in an atmosphere of trust and respect" (p. 14). Novelli (1990) offers a number of suggestions that would assist teachers with the establishment of an environment conducive to self-directed learning. These include shelving units that allow for children to have easy access to manipulatives, versatility in room arrangements, and interactive bulletin boards. A videotape, Organizing the Child-Centered Activity-Based Classroom (1991, May), distributed to all the school districts within the province, reiterates many of the points made by the previously mentioned authors and states that the activity-based classroom must be organized in such a way that children can play, make choices, accept responsibilities, and be actively involved in learning.

In summary, the nature of the learning environment in a child centered classroom has a number of specific recognizable features. Among them is the commonly held belief that the environment must be a supportive one in which children are actively participating in learning experiences. Certainly, as is evident from the previous discussion, it must be an

environment in which children's interests are evident and where the knowledge of how children learn is reflected. As Schwartz and Pollishuke (1990) so eloquently phrase it, the atmosphere must be "fostering, freeing, stirring and stimulating, inspiring, encouraging: Liberating" (p. 1). The instructional strategies associated with child centered education will be presented in the following section.

Instructional Strategies

A substantial body of literature relevant to the child centered classroom maintains that teachers in these types of classrooms hold a particular view of how children learn. These teachers, essentially, view children as being active learners with varying interests and levels of development. It is this philosophy that informs the use of specific instructional strategies.

NAEYC (1987) in its recent document Developmentally Appropriate Practices in Early Childhood Programs Serving Children From Birth Through Age Eight, provides a comprehensive listing of instructional strategies deemed to be appropriate for use with primary children, as well as a listing of inappropriate strategies. The first teaching strategy involves the use of an integrated approach to curriculum content. Brief periods of time allotted to individual curriculum areas are eschewed in favor of organizing learning experiences around thematic work, projects and learning

centers which encompass children's interests. The provincial primary curriculum guide, with one exception, holds a similar view. While the guide advocates interdisciplinary learning experiences, it also stresses the fact that instructional time must be planned for specific subject areas. The guide makes mention of the fact that teachers should familiarize themselves with the objectives from all the curriculum areas as this will help them effectively design activities taking in the various subject areas.

Schwartz and Pollishuke (1990) equally stress the need for an interdisciplinary approach to the primary curriculum and provide some practical ideas of how this can be accomplished. The authors propose that the curriculum requirements can be addressed by taking a topic e.g., from children's interests, or a spontaneous event such as a first snowfall, and planning reading, writing, and other experiences around it. Teachers are advised to create a web of activities related to a particular topic around "doing" words--words such as demonstrate, interview, create, observe, design, investigate, construct, explore, solve, edit and report. (An active learning web based on the model provided by Schwartz and Pollishuke (1990) is included in the Appendix). Teachers are also reminded of the importance of considering the levels of development, the interests, needs, learning styles and experiential background of the children when designing an integrated unit.

The second strategy put forth by NAEYC (1987) revolves around teacher and child use of time. NAEYC disregards the notion of utilizing planning time as correction time for seatwork activities and the use of center time as a frill when all other teacher-directed activities are complete. Instead, this organization insists teachers should plan learning centers that include developmentally appropriate tasks and activities that provide concrete and experiential learning opportunities.

The third strategy relates to grouping practices within the classroom and the need to use a variety of grouping arrangements including ad hoc skill groups, peer tutoring grouping, and individual groups.

DeVries and Kohlberg (1987) express the view that cooperative learning opportunities, where children of varying abilities work together, should abound in the primary classroom e.g., a class mural of the topic under study, cooperative problem-solving activities, and small group projects. Reid, Forrestal and Cook (1989) indicate small group work should be a daily occurrence as it is this type of learning that most effectively engages children in an active manner with the knowledge they are attempting to acquire. The province's primary curriculum guide also promotes the use of cooperative learning groups and stresses the importance of providing children with guidance on how to work and cooperate effectively in a group situation. The guide also lists three other

grouping arrangements--special interests groups, special needs groups and enrichment.

Gamberg, Kwak, Hutching and Altheim (1988), in a practical discussion of theme studies, explain that a child centered teacher will use teaching strategies such as theme studies to force children to assume responsibility for their own learning. The authors suggest that the use of a thematic approach will ensure that the children are "task-bound not seat-bound," and put the focus on "what is learned and under what conditions it is learned" (p. 224). Built into thematic studies is the idea of children exploring topics of interest to them. Of course, many benefits of this approach are outlined by the authors, benefits which are closely aligned with the current foci of primary education. They include:

1. Helping children develop healthy self-concepts.
2. Helping children develop their decision-making and problem-solving skills.
3. Having the potential of making modifications to respond to needs and capabilities of all children.
4. Providing many opportunities for hands-on learning opportunities, field trips, active learning, collecting information, reading, and writing.

Regan and Weininger (1988), in conceptualizing child centered education, identify specific instructional strategies considered to be part of the child centered classroom. Among these strategies are:

1. Provision of sufficient blocks of uninterrupted time to work on tasks.
2. Balancing of teacher initiated and child initiated activities.
3. Development of routines to create an orderly and supportive learning environment.
4. Provision of play opportunities.
5. Monitoring of children's activity by teachers to determine appropriate intervention points.

It is evident from the previous discussion that a repertoire of instructional strategies associated with child centered education exists. At the center of these strategies is the idea that play should be an essential part of primary programming.

Another popular view exists around the notion that the various subject areas should not be segmented into discrete periods of time, but must be integrated. Timetables must be kept flexible so that opportune teaching moments can be capitalized upon.

The use of learning centers is promoted as a way to nurture the active learning of children. Such learning centers would include a rich selection of manipulative materials that cater to both the needs and interests of individual children.

Certainly, the thematic approach is emphasized as a useful strategy with its particular strengths being that it is

an approach which lends itself to integrating subject matter and to developing learning experiences which encompass the interests, needs, and life experiences of the children.

Group learning, as a means of promoting interactive learning in the classroom, is also viewed as an instructional strategy appropriate to the child centered classroom. The final section of this review will look at the role of the teacher in the child centered classroom.

The Role of the Teacher

Day (1975) offers the following concise description of the role of the teacher: "The teacher no longer teaches just by telling but instead facilitates or guides learning by providing an interesting and meaningful environment" (p. 6). Chamberlin (1981) points out that teachers need to rethink their role and begin to view themselves as "frog kissers" who look for the prince in every child. Teachers of a child centered classroom must be concerned with the total development of children. They must be cognizant of the wide range of individual differences existent among children. Children Learning (1991), the provincial primary curriculum handbook, also considers this to be an important consideration and states: "To expect children to be the same or to make equal progress is unreasonable. Progress must be viewed in terms of individual gains over time" (p. 7). Teachers should place the optimal development of each individual child high on their

list of curriculum priorities.

NAEYC (1987) attributes the following features to the role of the teacher:

1. Teachers are responsible for providing children with opportunities to engage in child initiated and child directed activities.

2. Teachers are responsible for supporting and guiding children who have not yet learned to participate in free choice activity.

Popoff (1990), in a one page description of a child centered classroom, recommends that teachers give children more "muddling" opportunities and that they themselves should refrain from excessive "meddling" in favor of giving children time to touch, put together and take apart. DeVries and Kohlberg (1987) support this view and acknowledge that teachers should not permit worksheets and tests to dominate classroom activities. Popoff envisions the teacher as an individual who moves around the classroom encouraging and guiding the learning of children, establishing routines, and creating an environment not of chaos but of well organized management.

Schwartz and Pollishuke (1990) provide numerous suggestions on how teachers can effectively create a child centered classroom. They suggest that teachers build a classroom atmosphere that exudes warmth and the potential of learning in a risk-taking environment. Teachers can be more effective

facilitators of learning when "they create a classroom that promotes respect, risk-taking, peer teaching, decision making, problem solving and co-operation" (Schwartz & Pollishuke, p. 19). With respect to grouping practices, Schwartz and Pollishuke recommend to teachers that they should not totally dispel the use of homogeneous grouping strategies but ensure that such groups be flexible and temporary and established only as a means to provide direct assistance to children who need help with a particular skill. Teachers moving towards the creation of a child centered classroom must attempt to create a balance between large group, small group and individual activities, and between experiences that are child initiated and teacher directed.

Schwartz and Pollishuke (1990) also maintain that an important role of the teacher is to ensure that the classroom is rich in materials and a variety of learning centers. Among the centers they recommend are reading, mathematics, puppetry, art, invention, science, sand, mapping, and nature. The teacher's role would then be to design open-ended activities which provide a number of choices to children. In terms of materials it is suggested that teachers should not use workbooks and commercial reading programs but instead divert funding into purchasing children's literature and manipulative materials for science and mathematics. These authors stress the importance of teachers engaging children in conversation regarding their areas of interest and accordingly choosing

themes or topics to explore based on these expressed interests. Before theme exploration begins the authors suggest finding out what the children know about a topic and what they would like to know. The idea of using the "spontaneity of the moment" is put forth, for example, if a child brings a butterfly to school a teacher might use this incident as a basis for a science unit on insects.

Other recommendations made by the authors include utilizing children in collecting and preparing materials, being flexible in terms of changing and adapting activities to meet the needs and interests of individual children. Schwartz and Pollishuke also see the involvement of parents in the school as an important aspect of the teacher's role. "Well informed parents often become the biggest boosters of child centered classrooms" (p. 76). It is recommended that teachers go beyond the two or so yearly parent conferences and include parents in all aspects of programming--field trips, story telling, and as resource people sharing a specific talent.

Buckley (1991) stresses that teachers must take it upon themselves to eliminate strict scheduling and to promote integrated learning. They must plan a curriculum around the developmental levels, interests, needs and learning styles of the children they teach. Buckley further suggests that teachers give children choice of what they do and with whom they do it. Craig (1991) acknowledges that today's rapidly changing society and the increasing emphasis on using the

child's individual needs and interests as a basis for planning the curriculum adds complexity to the role of the teacher. Craig argues that teachers must develop a curriculum which maintains a balance among content, process and product. Craig further suggests that teachers need to be mindful of the wide range of individual differences within a class in terms of learning styles, levels of development, and experiential background and to provide experiences that meet these individual needs. For example, the tactile learner must be given experiences with manipulating materials and the child from an abusive background must be provided with a sense of warmth and security. As Craig sums up, "One method of presentation will not suffice" (p. 17). Teachers must use a wide variety of teaching methods.

Children's Learning (1991), the provincial guide for primary education, advises teachers to keep abreast of educational innovations, research findings and current literature. Staab (1991), in a description of a child centered classroom, describes the teacher's role as one of empowering children. Like Schwartz and Pollishuke (1990), Staab also puts forth the notion of developing thematic units around the expressed interests of the children or the spontaneity of the situation. Staab suggests that teachers who are knowledgeable with respect to the curriculum objectives can plan activities using the children's interests and not a teacher choice of theme.

The child centered classroom described by Staab features

a science center stocked with bugs collected by the children, a book center filled with books on bugs and a special interest center including rubber replicas of bugs. A sign with the question "What I Wonder About Bugs" is prominently displayed. Other particular practices Staab points out as being observable in a child centered classroom include: (a) teacher greeting individual children in the morning; (b) teacher discussing books from take home reading program with individual children; (c) teacher working with small group on research projects; (d) teacher showing flexibility in permitting children to work at the center of their choice; and (e) teacher allowing children to choose their own topics for writing assignments.

In summary, the role of the teacher in creating the conditions of learning so necessary for child centered instruction is indeed a significant one. The teachers who are thoroughly conversant with the nature of children's learning and who can adopt practices that take this important factor into account will ensure that child centered instruction is moved into the primary classroom. Undoubtedly, the role of the teacher is a varied one, one which encompasses many dimensions. To refer back to Schwartz and Pollishuke (1990), the teacher in a child centered classroom would be:

Moving and modelling,
Instructing, involving,
Chatting and caring;

Facilitating. (p. 1)**Summary**

Not surprisingly, the task of translating educational theory into practice is not an easy one. However, there is a wealth of information available regarding the teacher's role, instructional strategies, the nature of the learning environment, and the curriculum goals in the child centered classroom. The message that teachers need to reflect on their ideas of how children learn is stressed. The literature also emphasizes the need for teachers to utilize a variety of teaching strategies, to strive for interdisciplinary learning, to use thematic learning and a number of grouping practices. In conclusion, there are many practical suggestions available to teachers who are desirous of moving in the direction of creating a classroom which is child centered.

The Role of Play In Child Centered Instruction

Play and its value in facilitating the creation of a program which is child centered in nature must not be overlooked. Regan and Weininger (1988), NAEYC (1989), and Pollishuke (1989) readily associate play with the child centered classroom. Certainly, play has long been associated with the establishment of appropriate programming for primary children. Over 200 years ago, Froebel (cited in Frost &

Sauderlin, 1985), a noted German philosopher and educator, wrote: "Play is the highest expression of human development in childhood, for it alone is the free expression of what is in a child's soul" (p. ix).

All children have a natural propensity to engage in playful activity. The considerable body of literature on children's play points to the necessity of incorporating this natural inclination into the primary school curriculum. Play has long been a topic of interest among philosophers and individuals concerned with the education of young children. Schiller (1800), Spencer (1873) and Gross (1898), cited in Frost and Sauderlin (1985), all spoke of play as a way to expend surplus energy. Montessori (1964) referred to play as the child's work and extolled its value in educational settings. Piaget (1962) focused on the intellectual value of play and its importance to children's development. Through play, Piaget (1964) reasoned, children are provided with the opportunity to interact with their peers. Such interaction aids children in their ability to decenter and understand the world from the perspective of others as well as their own. Freud (1964) in his work outlined the therapeutic values of play and stressed its importance to alleviating anxiety and turmoil. Frank (1964) commented on the fact that play is children's way of learning what no one can teach them. The Plowden Report (1967) enunciated the need to view play as a process that adds to the learning of young children. Bruner

(1976) referred to play as serious business and was adamant about the relationship between play and learning. Vygotsky (1976) regarded play as the source of development and argued cogently about the important role it plays in the development of abstract thought. Dobbert-Lundy (1985) clearly shows that play is essential to total development.

A considerable body of literature linking the importance of play to all facets of children's development has been amassed. Frost and Kissinger (1976), in their elaboration on the need for a play environment, assert: "In play the child tests his limits to find out what he can and cannot do. He exercises persistence and problem solving and makes discoveries for himself as he plays" (p. 350). Moyer, Egerston and Isenberg (1987) contend that play is vital to the development of fine and gross motor skills. Rogers and Sawyers (1988) state, "Play can facilitate healthy development. Play may even provide the best context in which children grow and learn" (p. 70). Guha (1987) makes it clear that play must be a component of children's schooling: "It is in play that much of children's self-initiated, voluntary, active learning is expressed; it is in play that children explore what they want to know" (p. 74).

Guha (1987) provides a brief description of the arguments advanced by research for the inclusion of play in the curriculum. The first argument is linked to a romantic view in which it is felt that children should be given play opportunities

for the sheer value of happiness. The second refers to the behaviorist philosophy and holds that play should be used as a reward for learning. The third relates to the therapeutic value of play and its significance in helping children cope with anxiety. Lastly, the cognitive argument in which play is seen as the vehicle by which children learn to solve problems, express themselves artistically and creatively, and gain socialization skills is put forth. To this rationale for validating the significance of play in the educational program, Guha adds yet another, namely, the economic argument. This argument focuses on the need to increase the efficiency of learning by reducing the time teachers spend in building motivation for learning. Guha suggests, "... the quality of the child's learning is enhanced when it is in tune with self-directed, voluntary involvement" (p. 79).

Bergen and Oden (1988) state: "Play affects children's development of problem-solving and creative thinking abilities, communicative and expressive skills, mathematical and scientific knowledge, emotional maturity and social competencies" (p. 245). In so far as play can be acknowledged as a contributing factor to the development of the "whole" child, the authors argue for a classroom environment which promotes play. To this end they identify five key features of the optimal physical environment. These include: (a) the inclusion of a wide variety of concrete materials; (b) spatial arrangements which encourage movement and a variety of working

spaces; (c) provision of resources related to the various curriculum areas; (d) blocks of time to promote discovery learning and play development; and (e) displays reflective of the child's own artistic and academic work.

Bergen and Oden (1988) also envision a social environment conducive to collaborative and cooperative learning, active learning and self-initiation of activity. In the aforementioned social environment the teacher assumes a facilitative role, guiding children's learning through play.

Spodek and Saracho (1988) give consideration to four types of play and their educative function. Among them are creative play, language play, social play and manipulative play. Creative play is likened to fantasy play and is viewed as being important to the development of imagination and the coping with day-to-day problems. Language play is deemed important because it fosters literary development. "In social play young children learn to become responsive to their peers' feelings, to be patient, to wait for their turn, to be cooperative, to share materials and to obtain instant satisfaction when others value (i.e., like them)" (Spodek & Saracho, p. 11). Manipulative play, in which children freely explore materials, assists children with the learning of specific concepts. Spodek and Saracho challenge educators to "... optimize the educational consequences of play without sacrificing its essence" (p. 21).

A sampling of the literature pertinent to play also

points to the value of its use in a number of specific curriculum areas. Hawkins (1965), in his discussion of science teaching, adopted the phrase "messing about" to describe the importance of the play phase to scientific learning. Hawkins described messing about in science in the following manner: "Children are given materials and equipment--things--and are allowed to construct, test, probe, and experiment without superimposed questions or instructions" (p. 39). In Hawkins's view, this messing about provides the children with "an apperceptive background, against which a more analytical sort of knowledge could take form and make sense" (p. 39). It is also responsible for more intense involvement with the materials and a broadening of experimental interests on the part of the children.

Pelligrini (1980) links play to the literacy development of young children, Yawley (1980) cites the value of puppet play to the development of oral language, and Szekely (1983) advocates the immense value of play to the teaching of art and suggests exploratory, experimenting times are vital to each art lesson. Play allows children to draw upon their own experiences as sources of inspiration. It is with the introduction of play into the classroom that children become discoverers, initiate their own activities and cope with artistic challenges. Play truly inspires the artist, and for this reason must be an integral part of the art curriculum. Szekely suggests, "Play is a way of research both for the

artist and child, allowing them to approach everything as if new and to work out any unknown or interesting ideas" (p. 24). Suydam (1984) reports on the value of playful interaction with materials as a contributing factor to the development of children's mathematical problem-solving abilities.

Severeide and Pizzini (1984) insist that play has an important function in the teaching of science. In their elaboration on the role of play, Severeide and Pizzini summarize the research findings and instructional implications concerning play. These include:

1. The value of play as a medium for developing competencies vital to the development of thinking processes.
2. The role of play in the development and enhancement of problem-solving skills.
3. The value of play to creating a risk-free learning environment.
4. The role of play in fostering positive attitudes towards learning.
5. The need to carefully guide play experiences by intervening only to move thinking along.
6. The need to use strategies that promote productive play.

Following this summary, the authors offer practical suggestions on how play might be incorporated into the classroom. A classroom in which materials and time to use them, role playing, and preliminary "play" opportunities are

present, is envisaged. The teacher in the role of using play to promote new learning is highlighted.

Henniger (1987) contends that play serves an important role in both the development of mathematical and science learnings. He identifies curiosity, divergent thinking, and motivation to learn as three attitudes essential to the effective learning of science and mathematics. Henniger views play as a process-oriented activity that utilizes the natural curiosity of children and interests them in the activity of finding out new things. This interest enhances the motivation of children to learn and serves to enrich their divergent thinking skills. With the formation of these attitudes children gain an eagerness and enthusiasm for studying the world of mathematics and science.

No discussion of play would be complete without a consideration of the computer. "The computer is indeed a marvellous learning device, but to children it is first and foremost a plaything--learning is a bonus" (Frost, 1985, p. x). Porter (1988) views the computer as another play choice in the early childhood classroom. The suggestion is made that teachers must be supportive of active computer play and cognizant of its role in the enhancement of concept understandings. Porter cautions against using the computer as a tool for drill and practice. When this safeguard exists the computer becomes an active learning tool. As such, endless opportunities to develop social skills, cooperative decision-

making skills, flexibility and creativity are provided. Much support for these ideas can be found in the work of Papert (1981), the individual who developed the LOGO system. In doing so he provided the form of software needed to develop the potential for children to learn through active engagement with the computer. The computer holds great promise, now and in the future, for bringing play and technology together. Priority must, however, be given to utilizing the computer in such a way that children are put in the role of active learners (Clements, 1985, p. 125).

Summary

The review of the literature has affirmed the unique and vital role of play in the instructional curriculum. Play is a natural avocation for the young child and educators must not undervalue its contribution to children's learning and development. As a medium for learning, play provides children with the opportunity to learn about their world by interacting with it. Play offers children choices. It causes them to explore and question, resolve conflicts and solve a myriad of problems. It is imperative that primary teachers create classroom environments in which play can occur. "Child-initiated, child-directed, teacher supported play is an essential component of developmentally appropriate practice" (NAEYC, 1989, p. 9). Undoubtedly play can be considered the centerpiece of a child centered program.

By focusing on play in school, teachers will build on the child's natural way of learning. Play has enormous potential as a vehicle for developing a curriculum which begins with the spontaneous interests of the child. A curriculum evolving from the interests of children will indeed be a step toward child centered instruction. The first hand play experiences with materials will ensure that children learn concepts in concrete ways and move them towards the process of becoming active learners.

The words written in the Plowden Report (1967) remain as true today as they did over 20 years ago. "In play children gradually develop concepts of casual relationships, the power to discriminate, to make judgements, to analyze and synthesize, to imagine and to formulate" (p. 193).

Newfoundland and Labrador Department of Education:
Curriculum Documents and Resources

The efforts of the Department of Education in Newfoundland and Labrador to promote child centered instruction have manifested themselves in a number of ways. Along with Children Learning, A Primary Curriculum Handbook (1991), which assists teachers with planning instruction for the primary grades, recent years have seen the introduction of a number of specific curriculum guides. Many changes have occurred in the nature of authorized curriculum resources. For example, the

workbooks which normally accompany a basal reading program are no longer authorized. The emphasis has shifted to writing as a process. To support this emphasis on active writing, the Department of Education has built up a collection of instructional videos to assist teachers with the task of implementing new strategies to teach writing. The Department of Education, cognizant of the need to promote active mathematics learning, has supplied manipulatives, resource books and audio-visual resources to school boards across the province. A brief overview of the learning principles and instructional strategies advocated by the province's curriculum guides and resources materials will follow, beginning with the Primary Curriculum Handbook.

Children Learning, A Primary Curriculum Handbook

The Primary Curriculum Handbook (1991) expounds a specific view of the primary school curriculum, namely child centered instruction. Reference is made throughout the guide to the importance of planning instruction which "... actively involves primary children in the learning process and focuses on their individual needs and learning styles" (p. 2). The guide reiterates the necessity to focus on all aspects of development--social, emotional, physical, intellectual, and creative. A focus on total development is viewed as a prerequisite for children if they are to be given a strong foundation for living effectively in the next century. Eight

basic principles of learning considered central to a primary school curriculum are outlined below:

1. Previous experiences form the basis of learning.
2. Motivation enhances learning.
3. A rich, supportive environment facilitates learning.
4. Critical and creative thinking lead to learning.
5. Active involvement facilitates learning.
6. Learning proceeds from the concrete to the abstract.
7. Individual rates of development and learning styles

affect learning.

8. A variety of resources facilitates learning.

The guide states: "The primary curriculum must be designed so that children meet each learning situation in such a way that it will have meaning for them" (Children Learning, A Primary Curriculum Handbook, 1991, p. 5).

The Children Learning, A Primary Curriculum Handbook (1991) views the role of the teacher as a facilitator of learning who assists all children in the process of development to their fullest potential. The guide attributes great importance to the role of the teacher and states that: "The teacher, more than any other person in the school system, determines whether children benefit from curricular experiences" (p. 7).

In a discussion of individualized styles of learning among children, the guide stresses the need for teachers to provide programming which is multi-sensory in nature. Such

programming, suggests the guide, will provide children with opportunities to work with concrete materials. It will engage them in active learning opportunities. The fact that children possess unique rates of growth and development, coupled with their individualized styles of learning, further necessitates the use of different learning activities within the classroom. The guide notes the significance of this practice: "Not all children can engage in the same learning activities at the same time during the instructional day, because they are so different from one another in their interests, ambitions and their abilities" (p. 27). Parents, suggests the handbook, should be viewed as active partners in the primary program. Teachers must keep parents well informed about programming and seek to involve parents in all aspects of the school through parent participation programs. The handbook also includes a comprehensive section on evaluation. Self-evaluation, use of errors as diagnostic tools, and a focus on all three domains--the cognitive, affective, and psychomotor--are stressed.

Program of Studies (1990-1991)

This resource is published annually by the Department of Education as a vehicle to update educators on the recommended resources and instructional approaches advocated for the various curriculum area across the grades. The Program of Studies (1990-1991) envisions the primary school as a community of children. In establishing the purposes of education,

the program guide acknowledges: "The true test of primary schooling is whether it teaches children to do and to think" (p. 11). Both resource-based teaching/learning and the use of learning centers are recognized as being important instructional strategies. The guide postulates that learning must be meaningful for children and often refers to a hands-on, minds-on approach to the education of young children. The importance of establishing a learning environment within the primary classroom that reflects the needs and developmental levels of the children in attendance is emphasized.

Learning to Learn--Policies and Guidelines for the Implementation of Resource-Based Learning in Newfoundland and Labrador Schools (1991)

The release of this document by the Department of Education heralds significant support for child centered instruction. It propounds the philosophy that educators can no longer rely on a single textbook if they are to adequately educate children for the future world. Instead, they must strive towards developing learning experiences that are resource-based. A comprehensive view of resource-based teaching/learning is presented within the guide. Resource-based teaching/learning is concisely described as: "planned instructional activities, based on the needs of students and curriculum objectives, which actively involve students in the learning process through the use of a wide range of appropri-

ate learning resources" (p. 46). This description of resource-based teaching/learning is not really so different from the definition of child centered instruction advanced by Blenkin and Kelly (1987) and Regan and Weininger (1988). The teacher's role in resource-based teaching/learning, again similar to ideas put forth by advocates of child centered instruction, is likened to that of a learner facilitator.

In summary, the document, in describing and promoting the use of resource-based teaching/learning, supports instruction which is child centered in its design. Many of the instructional practices discussed in this document echo those detailed in other bodies of literature pertinent to child centered instruction. Among these are the suggestions that children should be given choices in activities, that the differing levels of development among children should be accommodated and finally, that provision be made for active learning experiences such as painting, debating, playing, and creating.

Mathematics

Primary Mathematics (1988), a mathematics guide for the teaching of primary mathematics, although released before Children Learning, A Primary Curriculum Handbook (1991), is described as a support document for the primary curriculum handbook. The preface of the guide establishes its precedence over any authorized series of textbooks. This fact in itself

is indicative of a move away from a textbook curriculum toward a more child centered approach to instruction. Previously much attention was given to the commercial mathematics program, Investigating School Mathematics. A curriculum guide specific to mathematics did not exist. This change in emphasis was demonstrated at a provincial Mathematics Conference in 1987, where the curriculum document was given a central focus in discussions, and the authorized program was given secondary attention. To affirm the importance of the guide a copy was given to every primary teacher in the province with the stipulation that the guide rather than the text was to determine the "what" and "how" of the curriculum.

Mathematics has been a leading curriculum area in the promotion of child centered instruction. In terms of the in-class support afforded primary teachers, the Department of Education has supplied a variety of manipulative materials to all primary classrooms. A number of media aids and resource books have also been distributed for use by classroom teachers.

A guide, Math Match (1989), dealing with the special needs child in mathematics, has also been authorized. This guide, like the Primary Mathematics Guide (1988), establishes the importance of making instruction relevant to the daily experiences of the children. For example, the use of objects from the environment to teach classification skills is identified as a valid learning experience. Both guides

promote learning through the different senses including the visual, aural, and kinesthetic senses. The use of learning centers is suggested for use in all primary classrooms because of their value in promoting active involvement and individualizing of learning for children.

Math Quest Guide

The authorized mathematics program reflects many of the guiding principles basic to child centered instruction. This program is activity-based in its orientation and readily promotes the establishment of a learning environment which is rich in materials and experiences. In describing the philosophy of its program, the following statement is made: "Children must manipulate materials and see the results of their activity to develop a solid grasp of mathematical concepts" (Math Quest Guide 3, 1989, p. 5). Many of the practices associated with child centered learning are recommended in the teacher's guide accompanying the program. These include continuous evaluation, development of problem-solving skills, integration with other curriculum areas, utilization of learning centers, small and large group work. In summary, the mathematics guide and the authorized textbook program for primary education are supportive of child centered instruction.

Science

The Program of Studies (1990-1991) maintains that children should be actively engaged in learning science. A number of approaches to teaching science are succinctly outlined. Learning centers, science projects, field trips, and integration are all listed as instructional strategies to promote active science learning. The Primary Science Curriculum Guide (1988), in setting forth the objectives of the science program, places a major emphasis on the development of thinking skills and the notion of children assuming responsibility for their own learning. The guide suggests that children need to be creative thinkers and effective communicators. To this end a variety of grouping arrangements--small, large and individual--are recommended.

The authorized program Addison Wesley Science is closely linked to the provincial science curriculum document. In fact, the chapter concept tables in the guide are taken directly from the authorized program. Many references can be found throughout the guide to active and involved learning. The guide also promotes resource-based learning. It does this by including lists of books, films and additional resources for each unit of study. The program, like the guide, maintains that the teacher's role in science should be a facilitative one. "The teacher is not a provider of answers, but a partner in investigation" (Addison Wesley Teacher's Guide 3, 1984, p. iv).

The program also shows a commitment to the importance of involving parents in the education of their children. The teacher's resource package includes parental involvement sections for each new topic under study.

Language

Whole Language, described by Pearson (1989) as an integrated, child centered, natural curriculum, is currently being advocated by the Department of Education. Experiencing Language, the Primary Language Curriculum Guide (1991) advocates learning literacy skills via this approach. The guide describes the primary classroom as a language active classroom. A multiplicity of active learning strategies such as interviewing, field trips, conferences, dramatizing, learning centers, and choral reading are proposed for classroom use. The importance of parental involvement in the language learning of their children is highlighted. In fact, a whole chapter of the guide is devoted to this particular subject. Collaboration of tasks and high mobility within the classroom is stressed. Children's own experiences and the creation of reading materials based on these experiences are discussed in depth. The guide advocates that the primary language program should be guided by a philosophy that, "... language learning is child-centred, not teacher dominated ... children learn by being actively involved in authentic language activities" (Experiencing Language, the Primary

Language Curriculum Guide, 1991, p. 12). The view that children learn language through talking and activity is predominantly addressed throughout the guide.

The move towards a more child centred language curriculum has been quite evident in the curriculum changes over the past number of years. Networks, the new language program authorized by the Department of Education, is quite different in its orientation from the formerly authorized Language Development Reading program. The latter program, laden with workbook components and testing masters, was organized in a sequential manner. In fact it was not uncommon to travel from school to school within a district and discover that all children were reading on the same page of a particular basal reader. A separate spelling program was also authorized for use with primary children so that this skill was taught in isolation from writing. Little provision was made for individual differences within the classroom. In contrast, the new program includes a variety of independent readers, big books and tapes. This program is not sequential in nature and incorporates such skills as spelling into the writing aspect of its program. In an identification of its features, Networks begins with a discussion of its commitment to child centered instruction: "Networks has been developed with children's interests and learning needs in mind" (Teaching Guide, Unit 5, 1988, p. 13). To illustrate this commitment, Networks adopts a thematic approach. One focus of the themes

is a personal one. Themes under this umbrella delve into issues relevant to the particular needs and interests of children, such as growing up and establishing friendships.

The Department of Education is now giving more focus to the other modules of reading instruction. At a 1988 provincial inservice, part of the inservice day was given over to a discussion of children's literature and the importance of its use in the primary classroom. A teacher also gave a slide presentation of Whole Language in action around her school district. It is clearly evident that with regards to language instruction the focus is shifting to an emphasis on learning how to learn. The fact that acquiring literacy skills needs to be a process that actively engages children is certainly promoted in the provincial curriculum document and authorized program.

Social Studies

Social Studies, like many of the other curriculum areas, acknowledges that child centered instruction is basic to the education of young children. "Instruction should be planned around events and situations so that learning will be relevant to the students" (Program of Studies, 1990-1991, p. 34). Teaching practices commonly associated with child centered instruction are addressed throughout the curriculum document, Design for Social Studies K-VI (1979). These practices include group work, inquiry learning, the use of resource

people, evaluation practices that actively involve the children in assessing their own learning, and a study of themes which are of relevance to the immediate world of the child.

Music/Art

In a discussion of these two curriculum areas within the Program of Studies (1990-1991), the need for music and art to be learner-based and flexible is emphasized. The learning strategies promoted in the authorized resources, Musicanada (1983) and Art in Action (1985), are again consistent with the principles of child centered instruction. Activities such as singing, creating, and cooperative learning activities are discussed and recommended both in the curriculum guides and the authorized resources.

Family Life/Health/Religion

All three curriculum areas delve into topics of study in an exploratory manner. Instructional strategies recommended in the guides and authorized resources reflect a process orientation to education. Discussions, research projects, and a variety of group projects are described as strategies to be adopted by the classroom teacher.

Physical Education

The authorized program for primary grades is the Battle-

creek program authored by Van Hoist (1974). The text, Physical Education Curriculum for Elementary Grades, which is part of this program, stresses the importance of individualizing the physical education program to meet the different needs of children. The teaching methods suggested throughout the guide actively engage the children in the learning experience. The children are invited to make suggestions as to why certain things are as they are, for example, why their bodies are pulled down as they jump. A focus on group cooperation is evident throughout the program with many of the suggested activities involving the children in the solving of a particular problem. The program continually draws the teacher's attention to the importance of allowing the children to think through problems on their own. It is significant to note that the teacher's manual of this program maintains from the opening page that its materials are intended to be child centered.

Summary

From the previous overview of the specific curriculum areas within the primary grades, it is apparent to this writer that the Department of Education supports and indeed points to the desirability of a child centered curriculum. All resources and curriculum guides speak to the notion that while all children grow and develop in a manner which is sequential and predictable, the individual differences in growth,

aptitudes, abilities and interests among a group of children who are the same chronological age can be quite varied. For this reason the idea that one program can be equally appropriate for all members of any group of children is dismissed. Emphasis is given to the importance of individualizing curriculum to provide for the wide range of differences which exist among children. The kinds of instructional strategies outlined in the various guides and resources are similar--resource-based teaching, learning centers, the thematic approach, the use of play, and the focus on learning how to learn. All guides and resources stress the facilitative role of teachers in the learning process. The avowed philosophy of each curriculum area is inextricably interwoven with the idea that education should concern itself with the development of the whole child. Permeating each guide and resource is the idea that a quality primary program is contingent on how successful educators are at designing a curriculum which matches the ways in which young children learn.

Child Centeredness and Education for the Future

In any discussion of child centered education the question of what constitutes the best type of instruction for young children inevitably comes to mind. Along with this question is the debate over the type of education necessary to prepare children to live in the world of the future. In

consideration of this question, the following section of the literature will relate to change and the impact it has on the decisions educators must make regarding the adoption of particular curricular approaches.

Pluckrose (1987) states: "The challenge of the 1980s and 1990s is not to see how far we can retreat into the past but to equip children with the skills they will need to survive in a rapidly changing society" (p. 154). Indeed, as Bob Dylan sang in the 60s, "the times they are a changing." Certainly, too, these changes are taking place with unprecedented rapidity. Technology, the ever expanding growth of knowledge, the changes in family structures and the move towards a more globalized society, virtually guarantee that the world of the twenty-first century will be vastly different from the one we know today. It would be negligent on the part of educators, in planning for the type of instruction best suited for educating children, to avoid giving due consideration to the world of tomorrow. Of course, in this issue much is speculative, yet the literature is replete with suggestions for educational reforms which take into consideration the nature of societal changes. Much of the literature concentrates its attention on identifying the major societal trends and the type of curriculum content and methodology needed to prepare children for these changes. Among the exhortations of the futurists there are many commonalities to be found. Toffler (1979) wrote prolifically on the change process and the need

for children to adapt to the changing world. Toffler described knowledge as a perishable entity and in light of this consideration advised educators to assist children with the tasks of learning, "... how to learn, unlearn and relearn" (p. 367). Children, asserted Toffler, must be effective decision makers who can examine and analyze the values held by themselves, their peers and their teachers. According to Toffler, all children must develop heightened communication and social skills.

Stonier (1982), in a scenario of societal changes, challenges educators to act on what is known of these changes and use it to respond to the educational needs of children. In outlining a list of objectives vital to a curriculum which is future oriented, Stonier recommends a consideration of the following factors. First, consideration must be given to the objective of education for enjoyment. In the future the need for physical work will be substantially reduced by technology. There will be a need for a labor force considerably different in nature. Career changes will be frequent and for this reason Stonier suggests the most important kind of teaching we can provide for our children will seek to develop "... certain categories of organizational skills which allow individuals to develop entrepreneurial self-reliance, to hunt skilfully for new areas of employment, or start up their own business" (p. 290). Certainly in the province of Newfoundland and Labrador, where the unemployment rate is high, and where economic

survival relies on so few industries, the need becomes even more pressing.

Stonier (1982) also elaborates on the need to foster communication and organization, for such skills will assist in the development of relationships with people and preparation for future living. Stonier proclaims that the knowledge explosion and the ease of access to computer information will necessitate a shift in the role of teachers and children. In an ensuing discussion, Stonier recommends that teachers not use an authoritarian approach to instruction. Instead the tasks of teaching and learning should be characterized as "... the common effort of exploring new knowledge" (p. 297). The skills of obtaining, applying and using knowledge will become essential. Such skills will evolve out of experiences with project work, both independently and with peers. To enhance the skills previously mentioned, Stonier acknowledges the importance of eschewing the principles of passive learning in favor of participatory principles of learning.

Kahn (1987) urges educators to be cognizant of the changes in family structures (single parents, two parents in the workforce) and urges educators to develop effective parental involvement strategies. Commenting on the changes in family demographics and the unique problems of latchkey children, Zigler and Ennis (1988) build a case for the need for schools to assume an ever greater role in the promotion of the social, physical, and emotional development of children.

Cornish (1986), envisioning the nature of a future oriented curriculum, identifies a number of trends applicable to the primary curriculum. Cornish implies that the age of technological advances will enhance the importance of the teacher's role. "The teacher will become the indispensable source of the human touch necessary to make learning real" (p. 16). Like Toffler (1979) and Stonier (1982), Cornish comments on the knowledge explosion and the need for schools to be instrumental in providing children with the skills necessary to become lifelong learners. That is to say, the principle of learning how to learn should be of paramount importance in determining the nature of the curriculum. Guha (1987) declares, "... flexibility, confidence, and the ability to think for oneself" (p. 79) are vital skills for living in the future. In looking back at the work of Benjamin (1989), the trend of teaching children how to learn is also evident.

Porat (1989), like Benjamin (1989), also compiled a list of views and opinions regarding the type of education necessary for the future. The compilation of information by Porat was divided into seven categories of sources. They include information by the futurists, scientists, pacifists, businessmen, politicians, graduates and educators. Following is a concise summary of each category and its major proclamation:

1. **Futurists** - knowledge alone is worthless, value lies in what is done with the information.
2. **Scientists** - thinking skills of children must be

developed, as well as the development of beliefs and attitudes vital to world survival.

3. **Businessmen** - education should extend beyond book knowledge and equip children to be learners.

4. **Politicians** - children should be helped with the task of developing into lifelong learners, capable of adjusting to the changing needs of the labor force.

5. **Graduates** - schooling should focus on developing communication skills, confidence in ability and decision-making skills.

6. **Pacifists** - children should grow into individuals who are decision makers and who value life.

7. **Educators** - teachers must become "educational entrepreneurs" and search for excellence in education.

On a different note, educational technology will bring with it the need to reflect on how such technology will be used in the classroom. Strohmer (1987) criticizes vehemently what she calls a "pigeon-training" approach to computer use. Strohmer suggests the use of computers for drill learning should not exist. Instead, their use for stimulating high level thinking, promoting cooperative learning, and bringing an information base into the classroom is advocated. O'Brien (1987) voices similar concerns but believes the use of exemplary software in the classroom "... can enable children to be active in the construction of knowledge" (p. 37).

Computers are growing in prominence both in the workplace

and in society. They will be part of the future, so educators must determine how they are to be used. In a report on the use of computers in early childhood, Clements (1985) offers a list of guidelines for using the computer. Such guidelines, if adhered to, will support the premise on which child centered instruction is based. In actuality, the computer has great potential for building a curriculum which encompasses the principles of child centered instruction. The first of these principles involves the use of the computer as an active learning tool. The second principle stems from the idea that experiences with the computer will enhance the enjoyment of learning, promote self-esteem, be integrative with other experiences, occupy moderate amounts of time and be related to program objectives.

Stewart (1990) also identifies a number of guiding principles to be given consideration in curriculum planning for the 90s. While these principles focus on secondary schools, their applicability to the primary school situation is immediately evident. The need to move towards a more individualized type of instruction, the need to focus on the development of critical thinking, decision-making skills, development of self-understanding and self-acceptance, are all foci identified for consideration in the planning of future curriculum directions.

Summary

It can be noted that the extensive body of literature germane to societal changes and their implications for curriculum planning are highly supportive of child centered instruction. The assertions of the futurists regarding the importance of the whole growth and development of children, the need to adopt teaching strategies that are based on the activity and experiences of children, and an educative process that identifies learning how to learn as pivotal to the curriculum, are all assertions that embrace the learning principles associated with child centered instruction. The words of Pluckrose (1987) serve to capture the essence of curriculum needs in the 90s:

We need now, more than ever before, to put children first, to make their needs paramount. Only then can we hope to produce the flexible people who will be equipped, emotionally and intellectually to face the change and challenge the next century will bring. (p. 154)

Conclusion

There is little doubt that the affirmations of the child centered theory of instruction appear to be well developed in the literature. The comprehensive body of literature relevant

to the historical roots of early childhood education, the role of play in children's learning, the constructivist theory of knowledge, the need to view education as a process, the significance of considering how children learn and the foresight of the futurists, all point to the need for a child centered curriculum. Yet, while the value of this type of curriculum is promoted in the provincial Primary Curriculum Handbook and in much of the early childhood literature, there remains a certain degree of ambiguity associated with its meaning to practicing teachers. The task of eliminating some of this ambiguity is the major focus of this work.

In Chapter III, the research methodology will be presented. This chapter will describe the population and the data analysis methods used in the study. An overview of the purpose of the study will be provided, along with a discussion of the reliability and validity measures.

CHAPTER III

Methodology

The Design of the Study

This chapter provides an overview of the research purposes. It also includes a description of the population sample, the research design, and the data analysis techniques utilized for the study. The reliability and validity concerns of the study are also discussed.

The purpose of the study was to:

1. Identify instructional practices considered by primary teachers to be illustrative of a child centered approach to education.
2. Examine the degree of congruence between instructional practices identified as child centered in the literature, including the curriculum guides, and teachers' perceptions of child centered instruction.
3. Identify factors that teachers perceive to be supportive of child centered instruction.
4. Identify factors that teachers perceive to be non-supportive of child centered instruction.

To accomplish these goals the study was designed in the following manner:

1. A comprehensive review of the literature relevant to children and the ways in which they learn was undertaken.
2. A questionnaire, using criteria extracted from the

review of the literature was developed.

3. The district superintendent, principals, and teachers were contacted by letter and permission to administer the questionnaire was sought. Permission to interview a select number of teachers was also sought.

4. Questionnaires were administered and interviews were conducted with the five teachers who consented to be interviewed.

Sample

Because of time restraints and geographic distances, the population was limited to approximately 60 primary (grades one to three) teachers from the Appalachia Roman Catholic School Board situated on the west coast of Newfoundland and Labrador. These teachers are representative of 11 schools.

Instrumentation

Questionnaire

For the purpose of this study, it was necessary to develop a questionnaire which would assist with the task of identifying characteristics of child centered instruction. Given this fact, a questionnaire was designed based on criteria extracted from the review of the literature, in

particular the NAEYC position statements on developmentally appropriate practices for primary grades and the provincial curriculum documents and resources. Bennett's (1976) questionnaire and subsequent adaptations of it, one by Ramsay and Ransley (1986), the other by Cramm, Kelleher and Parrot (1989) were used as models in designing the questionnaire for this study. The questionnaire was divided into eight sections, namely, Teacher Information Page, The Curriculum Goals in the Child Centered Classroom, Organizing the Learning Environment for Instruction in a Child Centered Environment, Instructional Strategies, The Role of the Teacher, and three open-ended parts. This was done to establish a frame of reference for each group of questions.

The items included on each section of the questionnaire related directly to the findings in the literature review. Questions pertaining to the use of concrete materials, learning centers, opportunities to manipulate and explore, and self-selection of activities were included because of their close affinity with play. Items dealing with error correction, active learning opportunities, peer interaction, use of high level questioning and utilizing children's interests in planning the curriculum were based on the review of the constructivist theory of knowledge.

The review of the literature on education as process resulted in the addition of items relating to the process/product orientations to education, motivation, development of the

whole child and a responsive curriculum. Many of the items relevant to grouping strategies, nature of knowledge, and the development of thinking skills were particularly pertinent to the literature which reviewed the nature of future education. Items encompassing such things as the learning of basic skills, development of self-esteem, interdisciplinary learning, thematic teaching, classroom displays, movement within the classroom and varied grouping practices were based on information obtained from the review of the curriculum documents as well as the section of the review which examined theory into practice.

Several items linked to the historical review were also added. These questions pertained to play, child initiated activity, a responsive curriculum and the totality of children's development. Of course it should be noted that many of the questionnaire items related to more than one section of the review.

Four sections of the questionnaire utilized a modified version of the five point Likert type scale. This modified version was used on the advice of experts who suggested that the neutral position (unsure) be eliminated from the final version of the questionnaire. The Likert scale has commonly figured prominently in data collection and helps ensure that the questionnaire is reasonable in terms of the amount of time required for completion. It was felt that such a format would provide greater uniformity in the way questions were answered

and help minimize the risk of misinterpreting questions. It would also simplify the tabulation of results. Three open-ended questions were also posed, for the purpose of collecting any other information pertinent to child centered instruction, in particular information dealing with factors that contribute either positively or negatively to the implementation of child centered instruction. It was felt that such questions would ensure that issues not dealt with in the questionnaire, and that ideas and opinions not covered in a structured type of questionnaire format, would be given an opportunity to surface. It would also provide respondents with more leeway in stating their position. This flexibility also made for greater validity in the responses. Several blank pages were included at the end of the questionnaire to give respondents an opportunity to clarify their position with respect to any of the questionnaire items. The questionnaire was subsequently administered to a sample like population.

Pilot of questionnaire.

A pilot administration of the questionnaire preceded the final study. Copies of the original questionnaire were administered to 12 kindergarten teachers with the Appalachia Roman Catholic School Board. Borg and Gall (1983) suggest such pretesting be undertaken in an effort to obtain information regarding the validity and reliability of the questionnaire. This group of teachers was selected on the basis of

their similarity to the research population. A number of blank pages were provided at the end of the pilot questionnaire, and respondents were asked in a covering letter to note any observed ambiguity with specific questionnaire items. Their input regarding questionnaire format, clarity of directions and ideas on how to improve the questionnaire was sought.

Based on the responses to the pilot questionnaire, several changes were made in the final version of the questionnaire. One noticeable flaw in the pilot questionnaire was that most of the teachers made no response to the open-ended questions. On this basis it was decided to break the question down into a number of smaller parts so that a select amount of space was available to the respondents. It was also decided to stress the importance of answering these questions in the covering letter which accompanied the questionnaire. It was further decided that two additional questions would be added to the teacher information page, namely, information on the grade and number of students the respondent was presently teaching. Item q in Part II was revised to include a grouping arrangement that was less subject to misinterpretation. Three items were rewritten from Part III and one item, which had a low rate of response, was eliminated. In Part IV, item u also caused a little confusion. A number of teachers were not exactly sure about what the bathroom/drinking routines referred to. Some interpreted it to mean actual lineup time

for the routine as a whole class, others took it to mean the amount of time that was taken to verbally explain the accepted behavior for bathroom and water fountain use after which the children would be free to engage in such routines of their own volition. Following these few minor revisions, the questionnaire was administered to all the primary teachers.

A cover letter briefly outlining the purpose of the study and requesting their participation was attached to the questionnaire. This letter also guaranteed anonymity to participants. In addition, the letter asked respondents to indicate their willingness to participate in a follow-up interview session. Follow-up letters were mailed to all teachers one week after the questionnaire was distributed. A second letter was mailed upon return of approximately half of the questionnaires. This letter thanked individuals for responding to the questionnaire and requested the cooperation of those individuals who had not yet done so.

Interviews

Individual interviews were conducted for the purpose of obtaining in-depth information regarding teachers' perceptions of child centred instruction and following up on responses to specific items. The interviews took place in either the participants' classrooms or their homes. Interviews were scheduled at a convenient time to both parties and conducted in a single session lasting, on average, from one hour to one

hour and a half.

The interview began with the interviewer providing a brief description of the purpose of the study. As much as possible, attempts were made to conduct the interview in an informal conversational manner. All five interviewees were agreeable to having the interview taped, so this was done. Upon completion of the interviews, all tapes were transcribed.

Statistical Analysis

Use was made of the SPSS-X computer program. This program provided the researcher with a statistical analysis of the collected data. The data were subsequently broken down by four independent variables. These included years of teaching experience, present teaching assignment, number of students in class, and training orientation. To test for significant differences, ANOVA, as recommended by Borg and Gall (1983) was used. Although ANOVA is used most frequently with experimental data, its use is deemed appropriate in a descriptive study when the researcher is attempting to determine significant differences between groups within the population sample. With respect to the formal teacher training variable, there were unequal numbers of teachers trained at the primary, elementary and secondary level. Because of this, caution should be exercised when interpreting the results pertinent to this particular variable.

Reporting of Statistics

In reporting the statistics for the study, the researcher has rounded them off to the nearest percentage point. Valid percentages are reported for each item.

Reliability Measure of Pilot

A reliability analysis was conducted on individual sections of the pilot questionnaire. On Part II of the questionnaire, an alpha of .7265 was obtained. The alpha for Part III was .3071, while the alpha for Part IV was .7184. The final section obtained an alpha of .6939. While the reliability levels for sections two, four and five were quite acceptable, the level for Part III was relatively low. To compensate for this, a number of items were deleted from the final version of the questionnaire. On Part III of the pilot questionnaire teachers noted ambiguities with four of the items. Three items were rewritten so that their meaning would be more clearly understood. The fourth item, which had a low rate of response, was deleted.

Summary

This chapter included a review of the research objectives, a description of the sample population, and the basic

research design. The development of the instruments was described as well as the reliability measures of the pilot.

Chapter IV will present the findings from both the questionnaire and the teacher interviews. A detailed discussion of these findings will be provided, including a summary of the teacher interviews.

CHAPTER IV
Analysis of Findings

Introduction

This study obtained information by using two methodological components: (a) a questionnaire administered to a group of primary teachers (grades one to three); and (b) interviews with five teachers who indicated their willingness to participate in follow up interviews. The findings from these two sources will be presented in this chapter under seven separate sections, with each section relating to a section on the questionnaire. Where applicable, responses gathered from the interview are interwoven into the various sections. A summary of the interviews will conclude the chapter.

Overview of Teacher Questionnaire and Interview

The Questionnaire

The teacher questionnaire was distributed to 60 teachers. Responses were received from 43. The purpose of the questionnaire was to:

1. obtain background information on respondents that might be used in the interpretation of the data,
2. obtain teachers' perceptions of the curriculum goals they consider to be important to child centered instruction,
3. determine teachers' opinions regarding the organiz-

ation of the learning environment in a child centered classroom,

4. gather information on the instructional strategies teachers perceive to be characteristic of child centered instruction,

5. collect teachers' views about the nature of the teacher's role in a child centered classroom,

6. receive feedback from teachers on their vision of a child centered classroom,

7. determine factors teachers consider to be either supportive or non-supportive of child centered instruction,

8. ascertain which specific aspects of their own program they regard as child centered.

In summary, the ultimate goal of the questionnaire was to seek information from teachers with respect to their perceptions of child centered instruction.

The Interview

The researcher had planned to interview a random sample of respondents. Unfortunately, however, only five of the teachers consented to an interview. All five teachers were interviewed subsequently. The purpose of the interview was twofold. First, it was a vehicle through which an increased understanding of teachers' perceptions regarding child centered instruction could be obtained. Secondly, it would provide teachers with the opportunity to elaborate further on

their responses to specific questionnaire items.

Part I: Teacher information data.

This part of the questionnaire elicited information concerning the background of teachers. The responses to all items are presented in Table 1. A general discussion of the findings will follow the table.

Table 1

Teacher Information

<u>Teacher Information</u>	<u>Number of Respondents</u>	<u>Percentage of Respondents</u>
<u>Sex</u>		
Male	1	2
Female	42	98
<u>Formal Teacher Training</u>		
Primary Oriented	18	42
Elementary Oriented	22	51
Secondary Oriented	3	7
<u>Level of Certification</u>		
Second Grade	1	2
Third Grade	-	-
Fourth Grade	9	21
Fifth Grade	15	35
Sixth Grade	16	37
Seventh Grade	2	5

Teacher Information	Number of Respondents	Percentage of Respondents
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Courses Completed
(within last two years)

1-2 Courses	9	22
3-4 Courses	6	15
>4	1	2
No Courses Completed	25	61

Teaching Experience

0-4 Years	3	7
5-9 Years	3	7
10-14 Years	5	12
15-19 Years	9	21
>20	17	40

*6 missing cases (number of individuals who did not respond to this question)

Type of Teaching Experience

Single Grade	43	100
Multigrade	13	30
Primary	43	100
Elementary	15	35
Secondary	4	9

Grade Presently Teaching

Grade One	15	35
Grade Two	14	33
Grade Three	14	32

Number of Students in Present Grade

<15	1	2
15-20	18	43
21-25	16	37
>25	8	18

Table 1 presents an overall profile of the teachers who participated in the study. The sample consisted predominantly of female teachers (98%). In terms of present teaching assignments there was a fairly even spread across grade levels, with approximately one third of the teachers teaching at each level. The teachers' certification level varied from second grade to seventh grade although the majority of teachers were certified at between the fourth and sixth grade. There was a fairly even split between the teachers who were primary trained (42%) and elementary trained (51%). Slightly over half of the teachers (61%) responded that they had not completed any courses within the last two years. The experience of the teachers ranged from 1 to 20 or more years, with the vast majority of teachers (73%) indicating they had taught 10 years or more. A small percentage of teachers had experience outside the primary field. A number of them (35%) indicated they had taught at the elementary level, while 9% indicated they had taught secondary school. While most teachers have taught a single grade during their career, 30% of the teachers acknowledged some experience teaching in a multigrade setting.

Part II: Curriculum goals in the child centered classroom.

A summary of the data obtained from this portion of the questionnaire is included in Table 2. For discussion purposes

the ratings assigned to the items on this section of the questionnaire are condensed to three groupings. The results of the ratings, assigned to "not important" and "fairly important," are grouped together while the ratings given to "very important" and "important" are placed together. The "essential" rating is dealt with separately. This decision was made because the majority of responses appeared to fall naturally into these three groups. Portions from the interviews that pertain to this part of the questionnaire are also discussed.

Table 2

Curriculum Goals in the Child Centered Classroom--Summary of Findings

Curriculum Goals	Not Important		Fairly Important		Important		Very Important		Essential	
	No.	%	No.	%	No.	%	No.	%	No.	%
(a) Promoting all aspects of development - physical, social, emotional, moral and intellectual	0	0	2	5	1	2	9	21	31	72
(b) Accepting that children generally proceed at their own pace of learning	0	0	1	2	4	9	8	19	30	70
(c) Promoting of learning through frequent opportunities to interact with concrete learning materials, e.g., math manipulatives	0	0	1	2	4	9	21	49	17	39
(d) Developing a curriculum which has a major focus on academic growth	0	0	5	12	23	53	13	30	2	5
(e) Encouraging pupil choice in activities	0	0	4	9	23	53	10	23	6	14
(f) Developing children's self-esteem	0	0	1	2	1	2	13	30	28	65
(g) Giving high priority to the learning of basic skills and concepts	0	0	3	7	8	19	20	48	11	26

Curriculum Goals	Not Important		Fairly Important		Important		Very Important		Essential	
	No.	%	No.	%	No.	%	No.	%	No.	%
(h) Helping children acquire the body of knowledge they will need for elementary school	2	5	5	12	9	21	18	42	9	21
(i) Organizing instruction based on the interests of the children	0	0	1	2	12	28	24	56	6	14
(j) Ensuring that children master the objectives outlined in the provincial curriculum documents	2	5	15	35	13	30	10	23	3	7
(k) Promoting independent learning	0	0	1	2	6	14	27	63	9	21
(l) Developing in children positive feelings towards learning	0	0	1	2	2	5	11	26	29	67
(m) Promoting a curriculum which is responsive to the developmental levels of individual children	0	0	1	2	3	7	19	44	20	46
(n) Accepting that knowledge is tentative and subject to change	0	0	3	7	15	35	13	30	12	28
(o) Promoting a differential curriculum e.g., blocks, periods of time spent on individual subject areas	3	7	8	20	17	42	10	25	2	5
(p) Designing teaching strategies that emphasize integrating the various curriculum areas e.g., theme-centered units of learning involving two or more subject areas	0	0	0	0	16	38	18	43	8	19
(q) Emphasizing process learning as opposed to the product	0	0	7	16	12	28	15	35	9	21
(r) Developing of thinking abilities	0	0	1	2	3	7	16	37	23	53
(s) Equipping children with skills necessary for lifelong learning	0	0	0	0	5	12	17	39	21	49
(t) Promoting learning through interaction with peers	0	0	0	0	13	30	20	46	10	23
(u) Creating a classroom environment that provides children with frequent opportunities for exploration e.g., experimenting with science objects to see what can be done with them	0	0	0	0	6	14	27	63	10	23

As indicated by Table 2, the following goals were rated as essential goals for child centered instruction by nearly two thirds of the teachers participating in the study:

1. Promoting all aspects of development--physical, social, emotional, moral and intellectual (72%).
2. Accepting that children generally proceed at their own pace of learning (70%).
3. Developing children's self-esteem (65%).
4. Developing in children positive feelings towards learning (67%).

Furthermore, approximately one half of the teachers considered the following goals essential:

1. Promoting a curriculum which is responsive to the developmental levels of individual children (46%).
2. Developing of thinking abilities (53%).
3. Equipping children with skills necessary for lifelong learning (49%).

Also of interest was the fact that a number of items taken together under the categories of important and very important emerged as a frequent choice among respondents. At least half, and often more than half of the teachers selected the following items as being either important or very important:

1. Promoting of learning through frequent opportunities to interact with concrete learning materials e.g., math manipulatives (9% important, 49% very important).

2. Developing a curriculum which has a major focus on academic growth (53% important, 30% very important).

3. Encouraging pupil choice in activities (53% important, 23% very important).

4. Giving high priority to the learning of basic skill and concepts (19% important, 48% very important).

5. Helping children acquire the body of knowledge they will need for elementary school (21% important, 42% very important).

6. Organizing instruction based on the needs of the children (28% important, 56% very important).

7. Ensuring that children master the objectives outlined in the provincial curriculum documents (30% important, 23% very important).

8. Promoting independent learning (14% important, 63% very important).

9. Promoting a curriculum which is responsive to the developmental levels of individual children (7% important, 44% very important).

10. Accepting that knowledge is tentative and subject to change (35% important, 30% very important).

11. Promoting a differential curriculum e.g., blocks, periods of time spent on individual subject areas (42% important, 25% very important).

12. Designing teaching strategies that emphasize integrating the various curriculum areas e.g., theme centered

units of learning involving two or more subject areas (38% important, 43% very important).

13. Emphasizing process learning as opposed to the product (28% important, 35% very important).

14. Equipping children with skills necessary for lifelong learning (12% important, 39% very important).

15. Promoting learning through interaction with peers (30% important, 46% very important).

16. Creating a classroom environment that provides children with frequent opportunities for exploration e.g., experimenting with science objects to see what can be done with them (14% important, 63% very important).

It appeared evident from the teachers' responses that most goals were perceived to be relatively important goals in the creation of child centered instruction. It is noteworthy that 40% of the teachers placed the goal of ensuring that the children master the objectives outlined in the provincial curriculum documents as either not important (5%) or fairly important (35%). On the other hand, 30% deemed it important, while 23% deemed it very important. Only 7% felt this goal was essential. Perhaps the only other item that teachers appeared to be strongly divided on was the issue of differential curriculum. A minimal percentage of teachers, only 5%, considered it essential, while 25% considered it to be very important, 42% important, 20% fairly important and a small percentage, 7%, ranked it as not important.

As previously stated, a number of interviews took place which followed up on some of the responses teachers gave to specific items. A number of salient points from the interviews will be highlighted. These will serve to illuminate the responses teachers made to several questionnaire items.

One of the questionnaire items (h), and likewise one of the interview questions 3(b), dealt with the goal of helping children acquire the body of knowledge they will need for elementary school. The majority of interviewees, and indeed respondents, considered this goal to be a very important one. It appears from teachers' comments that they feel somewhat pressured by expectations they perceive to be thrust upon them by the elementary school. Despite these feelings of pressure, there is evidence that teachers view knowledge acquisition as important in the child centered classroom. This is illustrated in the following comments:

I think the elementary school does put some pressure on you that perhaps isn't healthy but I think children come to school to gain some knowledge.

To go on to elementary there is some level of reading, writing and reasoning that you hope most children will acquire in the child centered classroom.

I think that in the system that we have--a step system where there is grade one, two, three, four, five, six ... there is an onus on the teachers to prepare the children for elementary and high school.

Still another teacher expressed the view that "standards" must exist in the child centered classroom:

There is a minimum standard or level of functioning that children should have, not necessarily at grade level but by a certain age. For example, eight year olds should know the alphabet.

Others viewed knowledge acquisition as being important for the child's sake:

If a child does not acquire knowledge when they go to elementary from grade three they are going to be frustrated.

I think for their own good they are more responsible if they know about things. I think they will talk out more, will write more and they will investigate more.

A second interview question 3(c) pertained to the responses teachers gave to item (d) developing a curriculum, which has a major focus on academic growth. Most respondents and interviewees attributed a high degree of importance to this goal. However, the interviewed teachers repeatedly stressed that this goal was no more important than any of the others--social, emotional, physical or moral. One teacher noted: "They are all intertwined, they go hand in hand."

Many of the teachers linked academic growth to the skills they considered to be basic. The following comments are illustrative of the areas of academic growth judged as important by teachers:

The goal of all education is that we want the children to grow in their ability to read, write and reason. I mean that is what they come to school for.

When looking at academics I think about reading and math. I think they certainly have a place in the child centered curriculum.

Reading and writing, math, too, are essential.

A final interview question 3(d) corresponded to item (m), promoting a curriculum which is responsive to the developmental levels of individual children. This goal appears to rank high among teachers. About half of them (44%) rated it as very important while another 46% of them rated it as essential. The importance of this goal appears to be unanimously supported by teachers, as borne out by the following responses:

There is no point in having a curriculum that is not responsive to the differing levels of development among children because all you will have is frustration on your part and the child's part.

We have to accept them for what they can learn when we have them for that year.

Children are all different; we have to approach them in that way.

Children are all individuals and they all develop at their own rate no matter what we would like them to do.

Part III: Organizing the learning environment for instruction in a child centered classroom.

This section of the questionnaire sought to acquire teachers' ratings of the degree of appropriateness they associated with a number of criteria related to the learning environment of a child centered classroom. The findings from this part of the questionnaire are presented in Tables 3 to 7.

Responses to items a to o are presented in Table 3. In cases where the degree of difference between these responses is minimal, they are grouped together for discussion purposes.

The remaining items (p to s) are presented in Tables 4 to 7 and discussed individually. As well, the results of the interview questions which paralleled several of these items are interwoven into the discussion.

Table 3

Organizing the Learning Environment for Instruction in a Child Centered Classroom--Summary of Findings

Factors Related to Learning Environment	Highly Inappropriate		Inappropriate		Appropriate		Highly Appropriate	
	No.	%	No.	%	No.	%	No.	%
(a) There is a place within the classroom where children can gather for whole class activities	0	0	0	0	16	37	27	62
(b) There is a formal arrangement of seating with desks and tables placed in rows	19	44	23	53	1	2	0	0
(c) Children usually decide where they want to sit within the classroom	1	2	18	42	22	51	2	5
(d) Children contribute their ideas to classroom displays	0	0	0	0	9	21	34	79
(e) The learning environment extends out of the classroom e.g., field trips to community, research projects at the library	0	0	0	0	15	35	28	65
(f) There are specific areas of the classroom where children can self-select activities	0	0	0	0	25	59	17	40
(g) A variety of concrete materials e.g., manipulative aids, teacher made games, toys, puzzles, blocks and art materials are available	0	0	0	0	10	23	33	77
(h) Children's work e.g., writing, art-work and special projects occupy a prominent position within the classroom	0	0	0	0	8	19	35	81

Factors Related to Learning Environment	Highly Inappropriate		Inappropriate		Appropriate		Highly Appropriate	
	No.	%	No.	%	No.	%	No.	%
(i) The most frequently used resources are the materials authorized by the Newfoundland and Labrador Department of Education	6	14	21	49	15	35	1	2
(j) A wide variety of resources are found in the classroom e.g., maps, globes, audio-visual materials, children's books	0	0	1	2	14	32	28	65
(k) Materials used in the classroom consist mostly of worksheets and workbooks	26	60	15	35	2	5	0	0
(l) Special needs children regularly receive their instruction in a segregated classroom	15	35	17	39	10	23	1	2
(m) Equipment and materials are open-ended and lend themselves to a variety of uses e.g., science materials, paints	0	0	0	0	24	56	19	44
(n) Materials are at children's eye level	0	0	1	2	21	49	21	49
(o) Classroom materials and equipment are matched to the developmental levels of the children	0	0	0	0	16	37	27	63

The results presented in Table 3 indicate that in excess of 60% of the respondents identified the following items as highly appropriate to the learning environment in a child centered classroom:

1. There is a place within the classroom where children can gather for whole class activities (62%).
2. Children contribute their ideas to classroom displays (79%).
3. The learning environment extends out of the class-

room e.g., field trips to community, research projects at the library (65%).

4. A variety of concrete materials e.g., manipulative aids, teacher made games, toys, puzzles, blocks and art materials, are available (77%).

5. Children's work e.g., writing, artwork and special projects, occupy a prominent position within the classroom (81%).

6. A wide variety of resources are found in the classroom e.g., maps, globes, audio-visual materials, children's books (65%).

7. Classroom materials and equipment are matched to the developmental levels of the children (63%).

Table 3 also indicates that approximately one third of the respondents identified the following criteria as appropriate features of the learning environment in a child centered classroom:

1. There is a place within the classroom where children can gather for whole class activities (37%).

2. The learning environment extends out of the classroom e.g., field trips to the community, research projects at the library (35%).

3. The most frequently used resources are the materials authorized by the Newfoundland and Labrador Department of Education (35%).

4. A wide variety of resources are found in the

classroom e.g., maps, globes, audio-visual materials, children's books (33%).

5. Classroom materials and equipment are matched to the developmental levels of children (37%).

Table 3 shows that there was considerable agreement on the items teachers perceived to be highly inappropriate or inappropriate features of the learning environment in a child centered classroom. These included:

1. There is a formal arrangement of seating with desks and tables placed in rows (42% highly inappropriate, 53% inappropriate).

2. Materials used in the classroom consist mostly of worksheets and workbooks (60% highly inappropriate, 35% inappropriate).

3. Special needs children regularly receive their instruction in a segregated classroom (35% highly inappropriate, 39% inappropriate).

As indicated in Table 3 there appeared to be no real consensus of opinion on the following items:

1. The most frequently used resources are the materials authorized by the Newfoundland and Labrador Department of Education (14% highly inappropriate, 49% inappropriate, 35% appropriate, 2% highly appropriate).

2. It appears as if teachers are divided on the issue of whether children should usually decide where they want to sit. Just over half (51%) of the teachers regarded this to be

an appropriate practice while 5% regarded the practice to be highly appropriate. A little less than half (42%) viewed this item as inappropriate, while 2% considered it to be highly inappropriate.

Seating arrangements.

On the questionnaire, teachers were asked to report on the degree of appropriateness they attributed to a variety of seating arrangements in a child centered classroom. As shown in Table 4, no teachers perceived it to be appropriate that children in child centered classrooms would sit separately (Table 4). The majority (81%) attributed a high degree of appropriateness to arrangements which have the children working in pairs or groups. This belief was reinforced by comments teachers made in the open-ended section of the questionnaire. The following responses are typical:

I think in a child centered classroom you would have children working together at tables or else you would pull their desks together.

I certainly wouldn't expect to see rows and rows of desks.

Grouping strategies.

No one particular type of grouping strategy was overwhelmingly perceived by teachers to be characteristic of child centered instruction (Table 5). While almost half of the teachers (41%) identified needs (remediation/enrichment) based grouping as the usual form of grouping in a child

centered classroom, over half of the teachers (58%) identified other forms of grouping strategies. It is interesting to note that none of the respondents associated ability based (homogeneous) grouping with child centered instruction.

Table 4

Seating Arrangements in Child Centered Classrooms (Item p)

Item p	Number of Respondents	Percentage of Respondents
In a child centered classroom, seating would mostly be arranged so that children sit:		
(Please select only <u>one</u> response.)		
Separately	0	0
Separately and in pairs	5	12
In pairs	3	7
In pairs and in groups of seats	19	44
In groups	16	37

Valid Cases = 43

Missing Cases = 0

Table 5

Extent to Which Various Grouping Strategies Are Perceived to Be Utilized (Item q)

Item q	Number of Respondents	Percentage of Respondents
Children usually sit in groups: (Please select only <u>one</u> response.)		
Needs (remediation/environment) based	17	41
Friendship based	2	5
Interest based	12	29
Ability based (heterogeneous)	10	24
Ability based (homogeneous)	0	0

Valid Cases = 41

Missing Cases = 2

One of the scheduled interview questions (Question 4) related to the grouping practices in a child centered classroom. The feedback obtained from this question provided a more detailed understanding of the types of grouping, teachers in the study, associated with child centered education.

The vast majority of interviewees conceded that the grouping practices they presently employ are child centered.

Most acknowledged that they could have selected all forms of grouping listed on the questionnaire and that it was difficult to label any one type of grouping as a "usual" form. The point that grouping must be flexible was made and that if there is a valid reason for using a particular grouping arrangement, then it is acceptable to do so.

A number of responses taken from the interview transcriptions illuminate the findings presented in Table 5. Among them:

Children who are slower can be helped by the brighter child and in some respects my brighter kids act as teacher aides so I tend to mix them up.

If children are interested in similar activities they should be permitted to work together.

Sometimes it is easier for me to gather together a group of children I know who are having difficulty with a particular concept than instructing them individually or going over to the group they are with.

Still, some forms of grouping were rejected by teachers. One teacher dispelled the idea of using friendship grouping, suggesting that there would always be a few children who were left out. Still another teacher suggested that since she became more child centered in her teaching she is not so preoccupied with a particular grouping strategy. She commented that, "Children should sit wherever they feel they are going to be better able to learn."

All teachers who participated in the interview noted that children would never be found sitting in rows of desks in a child centered classroom. Instead they would be sitting in

groups of three or four, face to face, thus allowing a great deal of interaction.

Characteristics of movement.

The findings shown in Table 6 suggest that 60% of the teachers perceive a high degree of free movement in a child centered classroom. The remaining 40% of the teachers however, considered restricted movement to be the norm in such a classroom. That is to say, they agreed that movement would be limited to learning center time, free times, and times specified by the teacher.

Table 6

Characteristics of Movement in a Child Centered Classroom (Item r)

Item r	Number of Respondents	Percentage of Respondents
Movement in a child centered classroom is best characterized by: (Please select only <u>one</u> response.)		
No movement permitted	0	0
Movement only during learning center work	5	12
Only at times specified by the teacher	9	21
Only during free times e.g., recess time, lunch time, upon completion of work	3	7
Free movement of children	26	60

Valid Cases = 43

Missing Cases = 0

Classroom displays.

Well in excess of half of the teachers (65%) responded that classroom displays in the child centered classroom would be characterized by an equal amount of commercial, teacher made and child produced materials (Table 7). All teachers rejected the idea of large displays of commercial and teacher made materials. It is interesting to note that one-third (33%) perceived that classroom displays in a child centered classroom would be made up of mostly child produced work.

Table 7

Perceived Nature of Classroom Displays (Item s)

Item s	Number of Respondents	Percentage of Respondents
Classroom displays are best characterized as: (Please select only <u>one</u> response.)		
Largely a display of commercially purchased materials	0	0
Mostly work completed by the children	14	33
Equal amount of commercial and teacher made displays	0	0
Mostly teacher made materials	1	2
Equal amount of commercial, teacher made and child produced materials	28	65

Valid Cases = 43

Missing Cases = 0

Part IV: Instructional strategies.

In this section of the questionnaire, an examination of the instructional strategies teachers perceive to be appropriate to child centered instruction was pursued. Teachers were asked to rate the degree of appropriateness they would assign to specific instructional strategies (a to s), as they applied to the child centered classroom. The findings relevant to these particular items are summarized in Table 8. As was the case with the findings in the previous section, categories are collapsed together where feasible and discussed in this manner.

Table 8

Teachers' Perceptions: Instructional Strategies--Summary of Findings (Items a to s)

Characteristics of Instruction in a Child Centered Classroom	Highly Inappropriate		Inappropriate		Appropriate		Highly Appropriate	
	No.	%	No.	%	No.	%	No.	%
(a) A high degree of compulsory activities the children must complete	5	12	20	46	16	37	2	5
(b) A balance between whole group, small group and individual working times	0	0	1	2	17	39	25	58
(c) Uninterrupted periods of time during the day when children engage in activities of their choice	0	0	3	7	33	77	7	16
(d) Children frequently engaged in self-evaluation of their work	1	2	3	7	30	70	9	21
(e) Children given daily opportunities to manipulate and explore objects such as arts and crafts materials, games	0	0	4	9	26	60	13	30
(f) Reading taught as a separate subject during a scheduled time	14	33	22	52	6	14	0	0

Characteristics of Instruction in a Child Centered Classroom	Highly Inappropriate		Inappropriate		Appropriate		Highly Appropriate	
	No.	%	No.	%	No.	%	No.	%
(g) Children working in learning centers only when they have completed all assigned activities	13	30	24	56	6	14	0	0
(h) Computers used mostly as a tool to reinforce previously taught skills	2	5	17	40	22	52	1	2
(i) Themes selected on the basis of specific interest expressed by the children	0	0	1	2	28	65	14	33
(j) External rewards such as stickers used generally as motivation tools	1	2	5	12	29	67	8	19
(k) Timetables generally used to organize the week's activities	2	5	3	7	30	70	8	19
(l) Science lessons consisting mainly of watching teacher demonstrations	23	53	18	42	2	5	0	0
(m) The regular use of grouping strategies e.g., cooperative learning groups, peer teaching groups, interest groups	1	2	2	5	24	56	16	37
(n) Use of open-ended questions e.g., what would happen if?	0	0	1	2	13	30	29	67
(o) Children being rarely permitted to help each other with classroom activities	28	65	14	33	1	2	0	0
(p) Rewards and punishments used as the preferred methods of discipline	13	31	15	36	14	33	0	0
(q) Use of teaching strategies consistent with an interdisciplinary approach e.g., theme-centered units involving two or more subject areas	0	0	0	0	30	70	13	30
(r) Spelling tests administered weekly	7	17	17	40	17	40	1	2
(s) Children being encouraged to develop responsibility and self-discipline	1	2	0	0	9	21	32	76

Since they involved a different form of rating scale, the findings obtained from four additional items (t to w), are presented in four separate tables (Tables 9 to 12) and

discussed individually. A substantial number of interview questions (questions 5 to 7) were essentially follow up to the items on this section so where it was deemed appropriate, responses were used to substantiate particular findings.

In this portion of the questionnaire as indicated in Table 8 there appeared to be a wider degree of discrepancy between the teachers' responses than in any other part. Only two items were ranked by a large number of teachers as being highly appropriate. They were:

1. Use of open-ended questions e.g., what would happen if? (67%).
2. Children being encouraged to develop responsibility and self-discipline (76%).

Table 8 shows that one other item was ranked by slightly over half (58%) of the teachers as highly appropriate. This was in reference to establishing a balance between whole group, small group and individual working times.

The responses presented in Table 8 show a high degree of consistency among the items receiving the lowest ratings from teachers. The following items were among the ones assigned either a rating of highly inappropriate or inappropriate:

1. Reading taught as a separate subject during a scheduled time (33% highly inappropriate, 52% inappropriate).
2. Children working in learning centers only when they have completed all assigned activities (30% highly inappropriate, 56% inappropriate).

3. Science lessons consisting mainly of watching teacher (53% highly inappropriate, 42% inappropriate).

4. Children being rarely permitted to help each other with classroom activities (65% highly inappropriate, 33% inappropriate).

5. Rewards and punishments used as the preferred methods of discipline (31% highly inappropriate, 36% inappropriate).

6. Spelling test administered weekly (17% highly inappropriate, 40% inappropriate).

The following items were ranked appropriate by over two thirds of the teachers:

1. Uninterrupted periods of time during the day when children engage in activities of their choice (77%).

2. Children frequently engaged in self-evaluation of their work (70%).

3. Children given daily opportunities to manipulate and explore objects such as arts and crafts materials, games (60%).

4. Themes selected on the basis of specific interest expressed by the children (65%).

5. External rewards such as stickers used generally as motivation tools (67%).

6. Timetables generally used to organize the week's activities (70%).

7. Use of teaching strategies consistent with an

interdisciplinary approach e.g., theme-centered units involving two or more subject areas (70%).

8. The regular use of grouping strategies e.g., cooperative learning groups, peer teaching groups, interest groups (56%).

Question five of the interview queried teachers on the responses they gave to item j in this section. This item pertained to the use of external rewards as a motivational tool. Nearly all interviewees focused on the idea that such rewards were instrumental in achieving the goal of getting children to complete specific tasks. Some typical responses included:

The bigger the sticker, the more interested I found they were in getting the work done.

They do work well as motivational tools in any type of classroom. If you want the children to read a certain number of books, stickers work.

Four of the five teachers interviewed stated they used stickers because the children liked to receive them. Most teachers acknowledged that all children would receive stickers, for one thing or another, during the course of the day. One interviewee cautioned that stickers are currently being overused and made the following remark: "Sometimes the only reason children are doing work is to get a sticker or star. I mean we give them too freely sometimes."

All teachers recognized intrinsic motivation as having a larger role to play in child centered instruction and suggested that a child centered teacher could use stickers

discriminately and thus not present them to children as they complete each and every piece of assigned work.

Teacher directed lessons to whole class.

The results of Table 9 indicate that approximately half of the respondents (46%) held the perception that teachers would spend 10% or even less time on teacher directed lessons to the class as a whole.

Table 9

Breakdown of Time Spent on Teacher Directed Lessons to Whole Class (Item t)

Percentage of Time	Number of Respondents	Percentage of Respondents
0 - 10	18	46
11 - 20	10	26
21 - 30	8	20
31 - 40	2	5
41 - 50	1	3

Valid Cases = 39

Missing Cases = 4

Teachers working with small groups and individuals.

A high number of respondents (61%) felt that teachers in a child centered classroom would be working with small groups and individuals from 11-20% of the time (Table 10).

Table 10

Breakdown of Time Spent on Teachers Working With Small Groups and Individuals (Item t)

Percentage of Time	Number of Respondents	Percentage of Respondents
0 - 10	8	20
11 - 20	24	61
21 - 30	4	10
31 - 40	1	3
41 - 50	2	5

Valid Cases = 39

Missing Cases = 4

Paper and pencil exercises.

The data from Table 11 indicate that a high number of teachers (90%) perceive paper and pencil exercises to have only nominal importance in the child centered classroom. The time assigned to such tasks by the majority of respondents was

10% or less.

Table 11

Percentage of Time Spent On Paper and Pencil Exercises (Item t)

Percentage of Time	Number of Respondents	Percentage of Respondents
0 - 10	35	90
11 - 20	4	10

Valid Cases = 39

Missing Cases = 4

Cooperative group activities (children's choice).

Teachers were divided on the percentage of time they assigned to the activity of having children work cooperatively in groups on activities of their own choice (Table 12). Approximately half of the respondents gave a ranking of 10% or less of time to it, while the remaining half felt upwards of 20% of the time was an appropriate amount.

Table 12

Percentage of Time Children Spend Working Cooperatively in Groups on Activities of Their Own Choice (Item t)

Percentage of Time	Number of Respondents	Percentage of Respondents
0 - 10	19	49
11 - 20	19	49
21 - 30	1	3

Valid Cases = 39

Missing Cases = 4

Cooperative group activities (teacher's choice).

Sixty-seven percent of the teachers perceived that upwards of 40% of the time would be spent on the activity of children working cooperatively in groups, on activities assigned by the teacher (Table 13). A small number of teachers (3%) assigned over 50% of the time to this activity.

Table 13

Percentage of Time Children Spend Working Cooperatively in Groups on Activities Assigned by the Teacher (Item t)

Percentage of Time	Number of Respondents	Percentage of Respondents
0 - 10	12	31
11 - 20	21	54
21 - 30	4	10
31 - 40	1	3
41 - 50	-	-
51 - 60	1	3

Valid Cases = 39

Missing Cases = 4

Individualized activities (teacher-selected).

A high percentage of teachers (61%) felt that the amount of time spent on the activity of children working at their own pace, on individual activities assigned by the teacher in the child centered classroom would be less than 10% (Table 14).

Table 14

Time Percentage Allotted to Children Working at Their Own Pace on Individual Activities Assigned By the Teachers (Item t)

Percentage of Time	Number of Respondents	Percentage of Respondents
0 - 10	24	61
11 - 20	13	33
21 - 30	1	3
31 - 40	1	3

Valid Cases = 39

Missing Cases = 4

Individual activities (self-selected).

Teachers perceived that in a child centered classroom children would be working individually at their own pace on self-selected activities less than 30% of the time (Table 15).

Table 15

Percentage of Time Children Spend Working Individually at Their Own Pace, On Self-Selected Activities (Item t)

Percentage of Time	Number of Respondents	Percentage of Respondents
0 - 10	21	55
11 - 20	14	37
21 - 30	2	5
100	1	3

Valid Cases = 38

Missing Cases = 5

Separate subject learning.

Nearly three quarters of the respondents (74%) indicated that less than half the time in a child centered classroom would be spent on separate subject teaching (Table 16). Interviewees indicated that while most teaching would be of an interdisciplinary nature, there would be time when teachers would have to do specific subject teaching. Math was repeatedly identified as a subject to be taught separately.

Table 16

Breakdown of Time Spent On Activities--Separate Subject Learning (Item u)

Percentage of Time	Number of Respondents	Percentage of Respondents
-----------------------	--------------------------	------------------------------

Please indicate the approximate time teachers in a child centered classroom would spend on separate subject learning. The total for the three activities in item u should work out to be 100%. (Use the six day cycle as a guide to your calculations.)

0 - 10	8	21
11 - 20	3	8
21 - 30	9	24
31 - 40	8	21
41 - 50	1	3
51 - 60	6	16
61 - 70	2	5
71 - 80	1	3

Valid Cases = 38

Missing Cases = 5

Bathroom/water drinking routines.

Clearly teachers do not perceive large amounts of time being spent on bathroom/water drinking routines (Table 17). Among the teachers interviewed, most agreed that in a child centered classroom no such routine would be set up, although time would be taken at the beginning of the year to explain bathroom rules to children such as remembering to flush the toilet. One teacher made the following comment: "How can we make a routine out of going to the bathroom? This is certainly a very individual thing."

Table 17

Breakdown of Time Spent On Activities--Bathroom/Water Drinking Routines (Item u)

Percentage of Time	Number of Respondents	Percentage of Respondents
Please indicate the approximate time teachers in a child centered classroom would spend on bathroom/water drinking routines. The total for the three activities in item u should work out to be 100%. (Use the six day cycle as a guide to your calculations.)		
0 - 10	36	97
11 - 20	1	3

Valid Cases = 37

Missing Cases = 6

Interdisciplinary learning experiences.

A substantial percentage of the respondents (81%) contended that interdisciplinary learning experiences should be taking place 40% or more of the time in a child centered classroom (Table 18). All the interviewed teachers were strong advocates of this approach. The majority of the interviewees focused on integration as a tool for eliminating the problems associated with an overcrowded curriculum:

It's the only way to avoid a lot of the repetition evident in the various programs.

We don't have time to take each subject area and teach it.

Department of education curriculum guides.

A very small minority of teachers (7%) suggested that the Department of Education guides would be used virtually all the time while an even smaller percentage (5%) indicated they would not be used (Table 19). Teachers are divided on whether these guides should be used less than half the time (45%), or more than half the time (42%). Most of the teachers who were interviewed concurred that these guides would be used as the source of their program objectives. The following comments are indicative of the ways in which the interviewees perceive them to be used:

I have no time to sit down and develop a set of objectives, the guide does this for me.

We need to be aware of the expectations for children as they move from one grade to another.

I don't think I can have one set of objectives and a teacher in another school have a different set.

Table 18

Breakdown of Time Spent On Activities--Interdisciplinary Learning Experiences (Item

u)

Percentage of Time	Number of Respondents	Percentage of Respondents
-----------------------	--------------------------	------------------------------

Please indicate the approximate time teachers in a child centered classroom would spend on interdisciplinary learning experiences. The total for the three activities in item u should work out to be 100%. (Use the six day cycle as a guide to your calculations.)

0 - 10	2	5
11 - 20	0	0
21 - 30	4	10
31 - 40	1	3
41 - 50	6	16
51 - 60	7	18
61 - 70	7	18
71 - 80	3	8
81 - 100	8	21

Valid Cases = 38

Missing Cases = 5

Table 19

Perceived Extent to Which Department of Education Curriculum Guides Would Be Used (Item v)

Extent Curriculum Guides Used	Number of Respondents	Percentage of Respondents
To what extent would the curriculum guides published by the Department of Education be used? (Please select only <u>one</u> response.)		
Not at all	2	5
Less than half the time	18	45
More than half the time	17	42
Virtually all the time	3	7

Valid Cases = 40

Missing Cases = 3

Authorized textbooks.

For the most part teachers viewed the textbooks to be of limited value in the child centered classroom. A high percentage of teachers (71%) expressed the view that textbooks would be used less than half the time in a child centered classroom (Table 20). This is supported by the following

quotes taken from the interviews:

Textbooks are not important in a child centered classroom--it's what taught to the children and what comes from them that is important.

We have lot of library books in our school. Children are much more interested in them than they are in dull old textbooks.

One teacher who referred to her school as "resource poor" stated that the largest amount of available resource materials consisted of the textbooks sent out by the Department of Education, so she had little choice but to use them extensively.

Table 20

Perceived Extent to Which Authorized Textbooks Would Be Used (Item w)

Extent Authorized Textbooks Used	Number of Respondents	Percentage of Respondents
-------------------------------------	--------------------------	------------------------------

To what extent would the textbooks authorized by the Department of Education be used in a child centered classroom? (Please select only one response.)

Not at all	3	7
Less than half the time	29	71
More than half the time	7	17
Virtually all the time	2	5

Valid Cases = 41

Missing Cases = 2

Part V: The role of the teacher in a child centered classroom.

This part of the questionnaire assessed teachers' perceptions of the role of the teacher in the child centered classroom. A four point scale ranging from highly inappropriate (1) to highly appropriate (4) was used for 23 (a to s) of the items. For the remaining items (t to z) teachers were required to select one response from a choice of three.

The results obtained from items a to s are tabulated and presented in Table 21. Since, for the purpose of this study, the differences are minimal between the ratings of appropriate and highly appropriate and likewise between inappropriate and highly inappropriate, the results of these ratings will be discussed together. The data from the remaining items x to z have been presented in Tables 22 to 24 and discussed individually. The interview responses directly related to this section will be presented at the end.

The results generated from the data indicate that there are common characteristics which teachers perceive to be associated with the teacher's role in the child centered classroom (Table 21). A high proportion of teachers readily identified a number of indicators as being appropriate or highly appropriate to the teachers' role. A list of these follows.

1. Organize learning experiences around the expressed interests of the children (49% appropriate, 51% highly

appropriate).

2. Provide time for free exploration with materials e.g., manipulative aids, paints, materials for science investigations (56% appropriate, 44% highly appropriate).

3. Place a high priority on the behavior of children (63% appropriate, 7% highly appropriate).

4. Make use of questioning techniques that promote creative and divergent thinking (28% appropriate, 72% highly appropriate).

5. Have a high level of choice in the room (56% appropriate, 39% highly inappropriate).

6. Use positive guidance techniques e.g., fostering childrens' autonomy, redirection, providing children with the reason for a specific rule as the principle means of discipline (56% appropriate, 44% highly appropriate).

7. Seek to understand children's reasoning behind incorrect responses e.g., ask children questions to determine why they made a particular response (37% appropriate, 63% highly appropriate).

8. Provide regular opportunities for parents to participate in classroom activities e.g., reading a story to the children, tutoring, assisting with the making of learning games (58% appropriate, 37% highly appropriate).

9. Hold the belief that interest provides the motivation for children's learning (39% appropriate, 60% highly appropriate).

10. Make extensive use of stickers and other forms of external rewards to motivate children (53% appropriate, 12% highly appropriate).

11. Set up a broad range of activities for children to select from (56% appropriate, 42% highly appropriate).

12. Employ instructional strategies adapted to the children's learning styles and developmental levels (37% appropriate, 63% highly appropriate).

13. Schedule large blocks of time so children can carry through with their ideas and projects (60% appropriate, 30% highly appropriate).

14. Devise activities to promote the reasoning skills of children (53% appropriate, 46% highly appropriate).

15. View children as lifelong learners (35% appropriate, 65% highly appropriate).

16. Define student progress in terms of individual growth and development (23% appropriate, 77% highly appropriate).

17. Focus on the "doing" of an art activity as opposed to how it turns out (51% appropriate, 37% highly appropriate).

Likewise, there was strong agreement on the various aspects of the teacher's role that the participants in the survey characterized as either inappropriate or highly inappropriate (Table 21). The following items were among them:

1. Limit interactions with parents to the formal

reporting periods (58% highly inappropriate, 39% inappropriate).

2. Define student progress in terms of the criteria outlined in the Department of Education curriculum documents (5% highly inappropriate, 56% inappropriate).

3. Define student progress by comparison with other children (53% highly inappropriate, 44% inappropriate).

4. Assign numerical and/or letter grades to children (31% highly inappropriate, 57% inappropriate).

Roughly the same percentage of teachers characterized the issue of whether teachers should expect children at center time to move from one center to another on a predetermined schedule, as appropriate or inappropriate. While almost half (49%) deemed this practice appropriate, the other half gave it a low ranking in terms of its degree of appropriateness, (51%) considered such a practice inappropriate.

Table 21

The Role of the Teacher in a Child Centered Classroom--Summary of Findings

Aspects of Teacher's Role	Highly Inappropriate		Inappropriate		Appropriate		Highly Appropriate	
	No.	%	No.	%	No.	%	No.	%
(a) Organize learning experiences around the expressed interests of the children	0	0	0	0	21	49	22	51
(b) Provide time for free exploration with materials e.g., manipulative aids, paints, materials for science investigations	0	0	0	0	24	56	19	44
(c) Tell children when they are wrong and correct their errors	3	7	15	37	19	46	4	10
(d) Place a high priority on the behavior of children	1	2	12	28	27	63	3	7
(e) Make use of questioning techniques that promote creative and divergent thinking	0	0	0	0	12	28	31	72
(f) Have a high level of choice in the room	0	0	2	5	24	56	17	39
(g) Use positive guidance techniques e.g., fostering children's autonomy, redirection, providing children with the reason for a specific rule as the principal means of discipline	0	0	0	0	24	56	19	44
(h) Seek to understand children's reasoning behind incorrect responses e.g., asks children questions to determine why they made a particular response	0	0	0	0	16	37	27	63
(i) Limit interactions with parents to the formal reporting periods	25	58	17	39	1	2	0	0
(j) Provide regular opportunities for parents to participate in classroom activities e.g., reading a story to the children, tutoring, assisting with the making of learning games	1	2	1	2	25	58	16	37
(k) Hold the belief that interest provides the motivation for children's learning	0	0	0	0	17	39	26	60
(l) Make extensive use of stickers and other forms of external rewards to motivate children	1	2	14	33	23	53	5	12

Aspects of Teacher's Role	Highly Inappropriate		Inappropriate		Appropriate		Highly Appropriate	
	No.	%	No.	%	No.	%	No.	%
(m) Expect children at center time to move from one center to another on a predetermined schedule	3	7	19	44	21	49	0	0
(n) Set up a broad range of activities for children to select from	0	0	1	2	24	56	18	42
(o) Employ instructional strategies adapted to the children's learning styles and developmental levels	0	0	0	0	16	37	27	63
(p) Schedule large blocks of time so children can carry through with their ideas and projects	0	0	4	9	26	60	13	30
(q) Devise activities to promote the reasoning skills of children	0	0	0	0	23	53	20	46
(r) View children as lifelong learners	0	0	0	0	15	35	28	65
(s) Define student progress in terms of the criteria outlined in Department of Education curriculum documents	2	5	24	56	17	39	0	0
(t) Assign numerical and/or letter grades to children	13	31	24	57	5	12	0	0
(u) Focus on the "doing" of an art activity as opposed to how it turns out	1	2	4	9	22	51	16	37
(v) Define student progress in terms of individual growth and development	0	0	0	0	10	23	33	77
(w) Define student progress by comparison with other children	23	53	19	44	1	2	0	0

Self-concept activities.

In a child centered classroom most teachers (81%) perceived that self-concept activities would be devised on a frequent basis (Table 22).

Table 22

Frequency With Which Self-Concept Activities Are Devised (Item X)

Self-Concept Activities (frequency with which they are devised)	Number of Respondents	Percentage of Respondents
Devise activities to promote the self-concept of children.		
Frequently	35	81
Sometimes	8	19
Not at all	0	0

Valid Cases = 43

Missing Cases = 0

Retention practices.

A full 73% of the sample considered retaining children a rarity in the child centered classroom, while another 19% perceived this would never occur. An extremely small percentage (7%) perceived retention as an appropriate practice in the child centered classroom (Table 23).

Table 23

Teachers' Perception of Retention (Item y)

Retention of Children	Number of Respondents	Percentage of Respondents
Retain a child he/she considers to be lacking the skills necessary to cope with the materials at the next grade level.		
Frequently	3	7
Rarely	30	73
Never	8	19

Valid Cases = 41

Missing Cases = 2

Reporting children's progress.

The data in Table 24 indicate that none of the teachers considered a numerical letter grade format to be an appropriate vehicle for reporting children's progress to parents. There was no clear consensus, however, as to what would be the most appropriate. Forty-four percent supported anecdotal reporting while the other 56% supported a combination of

anecdotal and numerical.

Table 24

Reporting Progress to Parents (Item 2)

Reporting Children's Progress	Number of Respondents	Percentage of Respondents
Report children's progress to parents.		
In anecdotal format	19	44
In numerical/letter grade format	0	0
Combination of anecdotal and numerical	24	56

Valid Cases = 43

Missing Cases = 0

Teacher's Role in a Child Centered Classroom: Summary of Interview Responses

The following is a summary of the interview responses related to the teachers' role in a child centered classroom. When asked to describe the typical day of a teacher in the child centered classroom, all interviewees pointed to the fact that it would be a very active day. This opinion is repre-

sented by statements such as:

Well you won't be sitting down much, that's for sure. I think there would be a lot of asking, talking, and things like that going on in a child centered classroom.

There is a lot of movement around the room and the teacher would be going to individual children to help them on a one-to-one basis or working with small groups.

I would see lots of interaction among children.

Several items on this section of the questionnaire were followed up in the interview. First, teachers were asked to elaborate on the basis of their opinion regarding the placement of a high priority on the behavior of children. Secondly, teachers were asked about their response to the item: Define student progress in terms of the criteria outlined by the Department of Education.

When discussing behavior, the consensus of opinion among interviewed teachers was consistent with what the majority of the sample indicated. All teachers viewed this emphasis on behavior as an appropriate focus for the child centered teacher. The following comments serve to indicate why teachers responded in the way they did:

If you have disruptive behavior in your class it is going to ruin it for everyone.

You can't have children running over tops of desks in any type of classroom.

If you have an unruly class or a class where the children don't cooperate with each other, center time will be difficult.

With respect to defining progress, the majority of teachers in the interview, as well as in the survey, did not go along with the idea of defining student progress in terms of the criteria outlined in the Department of Education curriculum documents. Most teachers, as is evident from the following remarks, stressed that it was more appropriate for teachers to define progress in terms of individual achievement.

I don't bother about the Department of Education curriculum documents. I look at how far the children have come in terms of their own growth, if you are truly child centered that's what you do.

A work portfolio including samples of a child's work is all I need to determine progress.

One teacher remarked that it might be necessary occasionally to refer to the documents to determine "on average if a child is meeting grade level expectations." In this circumstance the criteria outlined in the Department of Education curriculum documents could be used.

Part VI: Teachers' vision of the child centered classroom.

On this section of the questionnaire teachers were asked to share their vision of the appearance of a child centered classroom in terms of the learning environment, instructional strategies, role of the teacher, the curriculum, or any other areas they would want to comment on. Twenty-nine teachers (67%) responded to this particular item. The findings

pertinent to each dimension will be presented in separate tables. All the responses to this question were perused for key words and phrases. A number of categories resulted. Tables 25 to 28 summarize the findings. As a very insignificant number of teachers made comments related to the "other areas" section, there is no discussion of this particular part of the question.

Table 25 indicates that a specific number of instructional strategies are readily envisaged by teachers in the sample as being a part of child centered instruction. The following comment taken from one of the questionnaires sums up the collective responses of the teachers to this section: "The use of concrete materials should be promoted. It should be recognized that children progress at their own rate and have different interests and abilities. Integration of subject areas is important."

Significantly most teachers (93%) envisaged the role of the teacher in the child centered classroom to be a facilitative one (Table 26). A sample of responses reveal teachers' conception of this idea:

The teacher's role should be that of a guide, helping the child achieve to his/her full potential.

The teacher should facilitate learning by using questioning techniques to understand a child's reasoning.

Working with individual children was also viewed as part of the teacher's role in the child centered class. The

following remark is typical of the many comments made by teachers: "It is essential that time be made to work with each child on an individual basis as frequently as possible."

Table 25

Envisaged Instructional Strategies

Envisaged Instructional Strategies	Number of Respondents	Percentage of Respondents
Use of concrete materials	18	62
Use of materials based on children's needs and interests	20	68
Small group work	23	79
Integrated curriculum	18	62
Use of themes	17	57
Use of learning centers	17	57

Table 26

Envisaged Role of the Teacher

Envisaged Role of the Teacher	Number of Respondents	Percentage of Respondents
Challenge the learner	17	59
Facilitator of learning	27	93
Working with individual children	19	65

Another factor seen to be connected to the role of the teacher centered on the issue of challenging the learner. Well over half (59%) made comments of the following nature:

The teacher should provide materials that motivate, challenge, and excite the learner.

The teacher is there to challenge the child, to teach him/her how to learn for himself/herself.

Teachers commonly envisaged the presence of six attributes in the child centered classroom (Table 27). Several comments taken from this section highlight many of them:

I see a child centered classroom as one that is abounding with color, print, children's displays, manipulatives, and games. It is a place that is inviting for children to learn.

A happy, peaceful and comfortable environment with lots of space.

The learning environment should be open, friendly and inviting.

To learn a child needs opportunities to analyze, investigate and manipulate.

With respect to the curriculum, two issues repeatedly occurred in the teachers' responses, namely the need for a curriculum which is based on the needs and interests of children and secondly the need for an interdisciplinary curriculum (Table 28). One teacher stressed the following point: "First and foremost, subject matter of the curriculum must be relevant to the interests and needs of the children."

Table 27

Envisaged Learning Environment

Envisaged Learning Environment	Number of Respondents	Percentage of Respondents
Active participation	19	65
Small enrolments	21	72
Rich in manipulative materials	19	65
Flexible seating arrangements	26	90
Inviting	16	55
Lots of physical space	17	59

Table 28

Envisaged Curriculum

Envisaged Curriculum	Number of Respondents	Percentage of Respondents
Interdisciplinary	19	65
Based on needs and interests	26	90

Comments supporting the need for an integrated curriculum were of the following nature:

Learning should not be compartmentalized into different subject areas, but rather it should be allowed to expand as it happens. Children need opportunities to explore the relations between the many areas of knowledge.

Integration is a must.

Part VII: Supportive and non-supportive factors relevant to implementation.

This section of the questionnaire consisted of an open-ended question designed to obtain teachers' opinions regarding the extent to which they perceived child centered instruction to be adopted by teachers. In addition, the researcher attempted to gain some insight into the conceptions teachers hold of the factors which are supportive or non-supportive of its implementation. A total of 31 teachers (72%) responded to this question.

In order to analyze the data obtained from this question, key words and phrases were culled from among the teachers' responses. The following three tables (Tables 29 to 31) provide a concise summary of the findings.

The majority of teachers in the sample (Table 29) saw child centered education as an approach which teachers are working toward. This is evident from a sample of the responses made to this particular item.

Teachers today are still trying to implement child centered instruction.

Teachers are working with some aspects of child centered education like whole language and learning centers, but we have a long way to go.

Some aspects of child centered learning have been adopted by most, but very few have fully child centered classrooms.

Table 29

Extent of Adoption of Child Centered Instruction

Extent of Adoption	Number of Respondents	Percentage of Respondents
Very little	5	16
Working towards	20	64
Extensively	6	19

A number of factors were identified as being supportive of adoption (Table 30). Two factors in particular were identified by over 90% of the teachers. These included availability of materials and sufficient preparation time.

The following comments, related to factors perceived to be supportive of adoption, encompass the majority of views expressed by teachers (Table 30):

A major factor is a teacher who is willing to accept change.

A good attitude towards it all, being open-minded, open to suggestions and not frightened to adopt a

new approach.

Smaller classes are needed, so are sufficient resources materials so that teachers will be less dependent on textbooks.

Teachers have to know there's someone who will be there to help.

Table 30

Factors Perceived to Be Supportive of Adoption

Factors Supporting Adoption	Number of Respondents	Percentage of Respondents
Materials readily available	29	93
Small class enrolments	19	61
Support from professional sources e.g., principals, teacher aides, board office staff	14	45
Parental involvement	11	35
Positive teacher attitudes	17	59
Sufficient preparation time	30	97

Teachers' perceptions of the factors impeding the adoption of child centered instruction are for the most part a reversal of the factors they consider to be supporting

factors (Table 31). There are a few exceptions, one being the Department of Education's policies on textbook prescription, the other being limited classroom space. A few comments taken directly from the questionnaire serve to shed some light on these two factors as well as the others:

Teachers who are not prepared to put forth the extra work necessary is as I see it one of the main reasons why this approach hasn't been adopted.

I don't believe we can do justice to child centered instruction until the Department of Education does away with the graded system and stops sending textbooks out for everything.

How can you set up a child centered classroom when you have wall to wall kids?

There are not enough hours in the days to gather up resources and get activities ready.

Table 31

Factors Perceived to Be Impeding Adoption

Factors Impeding Adoption	Number of Respondents	Percentage of Respondents
Large class size	25	81
Insufficient materials	27	87
Lack of preparation time	29	93
Negative teacher attitudes	14	45
Lack of parental support	12	38
Limited classroom space	15	48
Department of Education	18	58

Part VIII: Child centered instruction--Practices of teachers.

The final portion of the questionnaire was added for the purpose of collecting information from teachers regarding aspects of their own classroom they considered to be child centered. This section of the questionnaire received the lowest rate of response (58%) of any of the open-ended questions. With only one or two exceptions, the respondents identified the use of whole language, learning centers, the thematic approach and manipulative aids in their classroom as being illustrative of child centered instruction. The following comments were echoed in response after response:

I have centers. In this way children can learn at their own pace, be challenged, learn to reason and enjoy school.

I have a good supply of manipulative materials in my classroom.

The Language Arts program in my classroom is very child centered in that I plan activities to meet the needs of individual children.

Children in my class work on themes that are interesting to them.

Approximately one third of the teachers suggested that the type of teacher-child interaction taking place in their classroom was indicative of child centered instruction. The following is a sampling of the comments made about the nature of teacher-child interactions:

I try to give my children as much individual attention as I can.

I am trying to be more of a listener and observer rather than a talker.

The children in my class are all treated as individuals in their growth and learning.

I feel the students and I work together and I respect their opinions.

Several teachers identified "choice" as an indicator of child centeredness in their own classrooms:

Children in my class have a lot of opportunity to choose their own activities.

I let my children decide how they want the classroom furniture arranged.

In my classroom, if a child wants to put on a walkman and listen to music while he or she is working, that's okay by me.

The final indicator mentioned most frequently by teachers, at least by half of them, was integration of curriculum areas. Many noted that they attempted to integrate all the subject areas together under a particular theme.

Additional Findings

The researcher used the teacher information page of the questionnaire to assist with a further analysis of the data. The decision was made to conduct an analysis of variance on the responses made to questionnaire items based on the breakdown of four criteria. These included number of years teaching, orientation of training, grade presently teaching, and number of students in class. The significant differences found with each breakdown will be presented in tabular form. A discussion of the findings will ensue, beginning with a

discussion of the differences found with respect to the number of years teaching.

Differences related to number of years teaching.

In this subsection, the ANOVA findings for the variable "Number of Years Teaching" are presented and discussed. As indicated in Tables 32 and 33, there was a significant difference in teachers' perception of eight items when number of years teaching was considered. Three of these items 4(b), 4(h) and 4(m) were related to instructional strategies. Teachers who had 15 years or less teaching experience attributed a significantly higher degree of appropriateness to the strategy of creating a balance between whole group, small group and individual working times than did the teachers who taught for the longest period of time. The teachers with 15 years or less experience also attached a significantly higher degree of appropriateness to the regular use of grouping strategies, e.g., cooperative learning groups, peer teaching groups and interest groups. The teachers who taught for a period of more than 15 years ascribed a significantly higher degree of appropriateness to using the computer as a tool to reinforce previously taught skills than the less experienced teachers.

A significant difference was also found on two items with respect to the role of the teacher in a child centered classroom. Both of these items pertained to parental involve-

ment. The teachers who had taught 15 years or less attached a significantly higher degree of appropriateness to the activity of promoting regular opportunities for parents to participate in the classroom than did their counterparts. Conversely, the teachers who had taught more than 15 years attributed a significantly higher degree of appropriateness to the teacher's role of limiting interactions with parents to the formal reporting periods.

Two items relating to curriculum goals were also perceived in significantly different ways by each group. The teachers who had taught for 15 years or less attached a significantly higher degree of importance to the goal of promoting learning through frequent opportunities to interact with concrete learning materials than the others. The teachers who had taught more than 15 years attributed a significantly lesser degree of importance to the goal of ensuring that children master the objectives outlined in the provincial curriculum documents.

The final item in which a significant difference was found with respect to total number of years teaching came from Part III of the questionnaire. This section examined the learning environment of the child centered classroom. Teachers with more than 15 years of experience ascribed a significantly higher degree of appropriateness to the use of materials such as worksheets and workbooks than did the other group.

Table 32

**ANOVA To Determine If a Significant Difference Occurs in Questionnaire Items
Relative to Number of Years Teaching**

Variables	df	f	p
A balance between whole group, small group and individual working times. 4(b)	1,35	4.2286	.0473
Computers used mostly as a tool to reinforce previously taught skills. 4(h)	1,35	4.9491	.0326
The regular use of grouping strategies e.g., cooperative learning groups, peer teaching groups, interest groups. 4(m)	1,35	8.7199	.0056
Limiting interactions with parents to the formal reporting periods. 5(i)	1,35	5.4676	.0252
Providing regular opportunities for parents to participate in classroom activities e.g., reading a story to the children, tutoring, assisting with the making of games. 5(j)	1,35	4.5563	.0399
Promoting of learning through frequent opportunities to interact with concrete learning materials e.g., math manipulatives. 2(c)	1,35	4.0753	.0512
Ensuring that children master the objectives outlined in the provincial curriculum documents. 2(j)	1,35	4.8255	.0348
Materials used in the classroom consist mostly of worksheets and workbooks. 3(k)	1,35	4.5311	.0404

Table 33

Teachers' Mean Perception Score on Each Item As It Relates to Number of YearsTeaching

Variables	Total Number of		Mean
	Years Teaching	Cases	
A balance between whole group, small group, and individual working times. 4(b)	< = 15	6	4.0
	> 15	31	3.5
Computers used mostly as a tool to reinforce previously taught skills. 4(h)	< = 15	6	2.0
	> 15	31	2.6
The regular use of group strategies e.g., cooperative learning groups, peer teaching groups, interest groups. 4(m)	< = 15	6	4.0
	> 15	31	3.1
Limiting interactions with parents to the formal reporting periods. 5(i)	< = 15	6	1.00
	> 15	31	1.54
Providing regular opportunities for parents to participate in classroom activities e.g., reading a story to the children, tutoring, assisting with the making of games. 5(j)	> = 15	6	3.83
	< 15	31	3.22
Promoting of learning through frequent opportunities to interact with concrete learning materials e.g., math manipulatives. 2(c)	> = 15	6	4.83
	< 15	31	4.19
Ensuring that children master the objectives outlined in the provincial curriculum documents. 2(j)	> = 15	6	3.83
	< 15	31	2.90
Materials used in the classroom consist mostly of worksheets and workbooks. 3(k)	> = 15	6	1.00
	< 15	31	1.54

Differences related to grade presently teaching.

When looking at Tables 34 and 35, which include the tabulated data for the difference in teachers' responses relative to the grade taught, four significant differences were noted. Three of these differences were linked to Part V of the questionnaire which examined the role of the teacher.

The grade two teachers placed a significantly higher degree of appropriateness on the teachers' role in telling children when they are wrong and correcting their errors than teachers at the remaining grade levels. The teachers who placed a significantly lower degree of appropriateness on this practice were found at the grade three level.

Both the grade one and grade two teachers assigned the same degree of appropriateness to the teachers' role in employing instructional strategies adapted to the children's learning styles and developmental levels. The grade three teachers attributed a slightly lower degree of significance to this aspect of the teachers' role.

A wide variance was found between the teachers at the lower primary grades and the grade three teachers with respect to assigning numerical and/or letter grades to children. In comparison to the grade one and two teachers whose perceptions were similar, the grade three teachers attached a significantly higher degree of appropriateness to this aspect of the teachers' role.

The remaining difference was related to instructional

strategies. Grade two teachers attached a significantly higher degree of appropriateness to the administration of weekly spelling tests than teachers at the grade one level. It should be noted that this difference was only moderately different when compared to the grade three teachers.

Table 34

ANOVA To Determine If a Significant Difference Occurs in Responses Relative to Grade Presently Teaching

Variables	df	f	p
Spelling tests administered weekly. 4(r)	2,39	4.1744	.0228
Tell children when they are wrong and correct their errors. 5(c)	2,38	3.2046	.0517
Employ instructional strategies adapted to the children's learning styles and developmental levels. 5(o)	2,40	3.7186	.0330
Assign numerical and/or letter grades to children. 5(t)	2,39	3.0623	.0582

Table 35

Mean Scores of Teachers' Perceptions Of Items As They Relate to Present Teaching Assignment

Variables	Grade Presently		Mean
	Teaching	Cases	
Spelling tests administered weekly. 4(r)	1	15	1.86
	2	13	2.61
	3	14	2.42
Tell children when they are wrong and correct their errors. 5(c)	1	14	6.35
	2	14	9.21
	3	13	4.92
Employ instructional strategies adapted to the children's learning styles and developmental levels. 5(o)	1	15	3.80
	2	14	3.71
	3	14	3.35
Assign numerical and/or letter grades to children. 5(t)	1	15	1.66
	2	14	1.64
	3	13	2.15

Differences related to number of students presently in class.

Tables 36 and 37 show a breakdown of the differences in responses based on the number of students in a class. Significant differences were found in the responses to four items. Two of these items related to the role of the teacher, two others related to curriculum goals.

The teachers with more than 20 children in their class assigned a significantly higher degree of appropriateness to the role of the teacher in providing time for free exploration with materials than did the teachers with classes of 20 or less. The teachers with fewer than 20 children in their class placed a significantly higher degree of appropriateness on the role of the teacher in setting up a broad range of activities for children to select from than did the others.

When considering curriculum goals, the teachers with fewer than 20 students in their class placed a significantly higher degree of importance on the goal of helping children acquire the body of knowledge they will need for elementary school. The teachers with more than 20 students in their class attributed a significantly higher degree of importance to the goal of promoting learning through interaction with peers.

Table 36

ANOVA To Determine If a Significant Difference Occurs in Questionnaire Items Based on Number of Students Presently In Class

Variables	df	f	p
Provide time for free exploration with materials e.g., manipulative aids, paints, materials for science investigations. 5(b)	1,41	4.68	.0363
Set up a broad range of activities for children to select from. 5(n)	1,41	4.22	.0462
Help children acquire the body of knowledge they will need for elementary school. 2(h)	1,41	4.26	.0453
Promote learning through interaction with peers. 2(t)	1,41	4.0751	.0501

Table 37

Mean Scores of Teachers' Perception of Items Based On Number of Students in Class

Variables	Number of Students		Mean
	in Class	Cases	
Provide time for free exploration with materials e.g., manipulative aids, paints, materials for science investigations. 5(b)	< = 20	19	3.26
	> 20	24	3.58
Set up a broad range of activities for children to select from. 5(n)	< = 20	19	3.57
	> 20	24	3.25
Help children acquire the body of knowledge they will need for elementary school. 2(h)	< = 20	19	4.00
	> 20	24	3.33
Promote learning through interaction with peers. 2(t)	< = 20	19	3.68
	> 20	24	4.12

Differences related to orientation of training.

Tables 38 and 39 provide an indication of the items which were perceived in a significantly different manner by teachers depending on whether they were trained in primary, elementary or secondary methods. Two differences were found and both of these related to the role of the teacher. One obvious variation is that the teachers who were secondary trained attached a significantly higher degree of appropriateness to

the practice of assigning numeral and/or letter grades to children than did the primary or elementary trained teachers. The primary and elementary teachers affixed the same degree of appropriateness to this item.

The remaining difference was evident in reference to the practice of employing instructional strategies adapted to the children's learning styles and developmental levels. The primary and elementary trained teachers ascribed a significantly higher degree of appropriateness to this practice than the teachers who were trained in secondary methods.

Table 38

ANOVA To Determine If a Significant Difference Occurs in Responses Relative to Orientation of Training

Variables	df	f	p
Employ instructional strategies adapted to the children's learning styles and development levels. 5(o)	2,40	3.83	.0299
Assign numerical and/or letter grades to children. 5(t)	2,39	3.35	.0454

Table 39

Mean Scores of Teachers' Perception of Items Based On Training Orientation

Variables	Training	Cases	Mean
Employ instructional strategies adapted to the children's learning styles and developmental levels. 5(o)	Primary	18	3.7
	Elementary	22	3.5
	Secondary	3	3.0
Assign numerical and/or letter grades to children. 5(t)	Primary	17	1.7
	Elementary	22	1.7
	Secondary	3	2.6

Five Teacher InterviewsInterview 1 - Grade One teacher.

This teacher indicated that in many respects teachers around the province have begun to utilize a child centered approach to instruction only within the last two years. In discussing the nature of her own classroom, she admitted that it was not as child centered as she would like it to be. On the other hand, the teacher conceded that many of her current practices were in line with child centeredness. The following were named:

- use of whole language,
- learning centers,
- thematic approach,
- extensive use of manipulative materials,

- maintaining close contact with parents,
- collecting dated samples of children's work in folders,
- children working in mixed ability groups of three or four,
- utilization of a wide variety of resources,
- use of higher order questioning techniques e.g., I wonder what would happen if?
- interdisciplinary learning experiences,
- planning of activities around interests expressed by children e.g., literacy events planned around the current fad of Teenage Mutant Ninja Turtles,
- limited use of Department of Education textbooks and guides,
- change in her traditional role of just presenting information.

A main feature of child centered instruction, this teacher argued, is the focus on active learning. As a means of elaborating on what she perceived as active learning, the teacher provided a detailed account of a plant unit she recently completed in science. Activities taking place during this unit included having children plant seeds, bringing plants from home, recording observations of growth, experimenting to determine the conditions under which plants grew best and so on. A second key feature of this approach, suggested the teacher, centers on the notion of developing a

curriculum around the interests of the children. In an attempt to do this the teacher remarked that in her own class she is constantly talking to the children in an effort to discover their likes and dislikes.

Quite a large number of issues were highlighted by this teacher as acting against the implementation of child centered instruction. These included lack of support from administrative staff, meager financial support for purchase of materials, large pupil teacher ratios, teachers who lack the confidence to try new ideas, and the lack of preparation time. The teacher admitted that she was able to achieve the degree of child centeredness that she has in her class because many of these obstacles do not apply to her situation. Her class size is less than 10 and because she has limited family responsibilities she is able to prepare materials for learning centers on the weekends.

The teacher's experience with child centered instruction has persuaded her that this approach is workable in the classroom and that its advantages are multitudinous. She mentioned that her children are excited about learning, they are becoming more independent learners as evidenced by the fact that they now look in a dictionary or around the classroom to find the spelling of a word as opposed to asking her, and they are constantly asking questions especially in the area of science. She believes that the small grouping strategies that utilize mixed ability grouping benefit all

children, in particular the slower child who is helped along by the brighter one.

One concern about the implementation of child centered instruction focused on the Department of Education. The interviewee expressed the opinion that in some ways what the Department of Education was advocating and the concept of child centered education were diametrically opposed. She cited the Department of Education practices of prescribed textbooks, compartmentalized guides, and the breakdown of curriculum objectives by grade level, as hindrances to child centered instruction.

The interview concluded with a discussion of play. Regarding play, this teacher believes that play has no place in the primary classroom--it belongs in the kindergarten room. Despite this opinion, she did speak of "guarded play". When discussing activities in her classroom she talked about permitting children to use puppets as they were great for language development. She also made reference to a recent magnet display she had set up in her class which children were free to experiment around with whenever they desired. Furthermore, she acknowledged that the children made extensive use of manipulatives in mathematics. She held the view that while many children might consider such activities play, she did not consider them to be so as she always had her own hidden agenda for providing what she termed "guarded play" activities.

Interview 2 - Grade Three teacher.

This teacher identified the following aspects of her own program to be illustrative of child centered instruction:

- practice of evaluating each child on the basis of their individual achievement rate,
- permitting children to move freely around the room,
- desks arranged so children work together in small groups,
- wide variety of activities for the children to select from,
 - children deciding the physical layout of the room,
 - a display of children's work everywhere,
 - integration of subject areas,
 - children selecting themes they want to pursue.

While she indicated that her own classroom is fairly child centered, this teacher believes there is little evidence to support the view that such an approach is used widely across the province. In fact, she perceived the opposite to be true. She indicated that the Math Quest program, with its focus on manipulatives, has been instrumental in supporting such an approach but that while a few advances have been made there is still a long way to go. She spoke of visiting other classrooms and speaking to teachers at conferences and coming away with the impression that many classrooms are still very traditionally oriented.

She went on to point out a number of factors she con-

sidered to be hampering child centered instruction. The first was her conviction that the aging teacher profession lacks the energy necessary to create such classrooms, and secondly, her stance that teachers really have no idea what child centered instruction is about. She claimed that teachers may well consider their classroom child centered if they have learning centers set up but to her there is nothing child centered about such an approach when all children are doing the same thing. In reference to this, she gave an example of all children painting a tree at the art center and being provided with no choices.

In contrast to the majority of teachers, this teacher did not see financial restraints or lack of preparation time as impediments to child centered instruction. She suggested that perhaps teachers need to make better use of their preparation time. From here she went on to make mention of the fact that she recently visited a school that had an overabundance of materials and that she saw little concrete evidence that this school was any more child centered than her own school in which a scarcity of resources exists.

This individual assigned a high priority to the learning of basic skills. Basic skills to her encompassed the areas of reading, mathematics and creative thinking. She cited the sheer magnitude of knowledge growth as the reason for teachers to involve children in the process of how to access and utilize information.

It was felt that the provincial curriculum guides are important in the child centered classroom as some guidelines need to be established in relationship to what the children across the province should achieve at each grade level. She deemed it to be potentially harmful to the education system if teachers all pursued different objectives. On the other hand, she perceived the textbooks authorized by the Department of Education as an unnecessary component of child centered instruction. In lieu of textbooks the idea was put forth of a well-stocked library containing encyclopedias and a wide variety of children's literature.

A number of advantages were linked to child centered instruction. The first was that it increases the exchange of ideas among children so they learn to share and get along with each other. The second was the decrease in behavior problems. This teacher stated that as child centered instruction capitalized on the children's interests it created a great enthusiasm among them for what they were doing, hence eliminating most problems.

In conclusion, a lengthy discussion of play ensued. In brief, the teacher believes that the whole of education must come to be play. She related the innumerable pressures on children today (single families, abuse, poverty) as creating an urgent need for classrooms that are relaxing places to be. She ended by stating the viewpoint that play does not negate the existence of discipline but, in fact, creates discipline.

Through the informal exploration of materials, playing games such as checkers or snakes and ladders, children do learn concepts. Play is important to child centered instruction because it provides them with freedom, discipline, and the opportunity to laugh.

Interview 3 - Grade One teacher.

To this teacher, a key aspect of child centered instruction is its emphasis on the interests of children. She remarked that she capitalizes on such interests when selecting themes for development. It was mentioned that the themes chosen for study in her classroom often relate to the immediate environment of her children. Recently her class were studying about farms since it was spring time and many of them were excited about the lambs they saw around. This practice, along with her use of manipulatives and small group instruction, was viewed by the teacher as a step towards child centered instruction.

This individual felt that most teachers are attempting to implement child centered instruction but that a number of barriers exist. She remarked that some of these barriers were lack of funding, large pupil/teacher ratios, limited preparation time and teachers' own negative attitudes. When referring to the items which are supportive of child centered education frequent reference was made to the importance of collaboration with peers. She stated that her school has

another teacher working at the same grade level so it has become easier to plan more child-oriented activities. The importance of visiting other schools and observing child centered classrooms was also alluded to.

This individual maintained that teachers in a child centered classroom have a responsibility to ensure that children acquire the basic skills of reading, writing and math. The suggestion was made that the "how" of achieving this involved the use of varied instructional strategies. Reference was made to the use of interdisciplinary learning experiences, resource-based teaching and learning centers. In the opinion of this teacher, the curriculum guides produced by the Department of Education assist with the task of identifying appropriate objectives for the children and keeping teachers on approximately the same track. In her view it is important that teachers at each grade level maintain a high degree of consistency in their program objectives. Textbooks were viewed as being appropriate for use in the child centered classroom because younger children like the feeling of having "their own little book". The point was stressed that textbooks would be used for instructional purposes about half the time. The guidebooks which accompany the textbooks were considered to be useful, since she felt they often provided a wide range of enrichment and remediation ideas.

Her view of the environment in a child centered classroom is that of a busy place where the teacher is constantly moving

around the room, questioning children and spurring their thinking. "I wonder why?" she observed, would be a frequently used phrase. Children in such a classroom would be helping each other--working in a kind of buddy system. They would be seen moving around the classroom without asking the permission of their teacher.

The teacher in this type of classroom, stated the interviewee, would promote active learning in much the same way she does in her own classroom. An example was given of a study of temperature which involved having the children go both outdoors and around different areas inside the school to make temperature recordings.

The teacher perceived the use of play to be invaluable in her own classroom and a must in the children centered classroom. She pointed to several play activities in her own classroom--attribute blocks that two boys had recently used in their challenge to each other to make the biggest triangle and to a selection of teacher-made games. She ended the interview by saying that play is a big word to a child and that when it is attached to learning activities, teachers receive a much better response from children. Play, emphasized this teacher, is a big part of what child centered instruction is all about.

Interview 4 - Grade Three teacher.

This teacher indicated that her classroom is somewhat child centered and identified the following features of her

program as such:

- presence of five learning centers,
- organization of program around themes,
- expansive range of reading material in her class,
- current focus on reading and writing activities beyond the basals authorized by the Department of Education,
- seating of children in groups of four or five,
- frequent use of open-ended questions.

She professed that a child centered approach is being used minimally across the province (by less than 20% of the teachers). The view is held that it is primarily in the area of language arts that teachers have been promoting many of the instructional strategies associated with child centeredness such as the use of learning centers, providing children with a wide range of reading materials and the development of themes which evolve out of the interests of children.

A number of factors were seen to be non-supportive in the implementation of this approach. Among those cited were lack of materials, insufficient support from other individuals, especially teachers on staff, and in particular the principal. The negative attitudes held by some teachers, more specifically the attitude that this approach results in chaos within the classroom, was identified as another impeding factor. Likewise, a number of sources were mentioned by this teacher as being supportive of child centered instruction. These include plenty of resource materials, small pupil/teacher

ratio (approximately 15:1), and some degree of in-class support, either in the form of a volunteer helper or a remedial teacher.

One other element identified as a source which would make the transition to child centered instruction easier for teachers was also referred to, namely the need for an integrated curriculum. The teacher pointed out that it is up the Department of Education to create a more integrated curriculum, as classroom teachers lack the time to figure out how this can be achieved.

The interviewee indicated that the learning of basic skills would be given a high priority in the child centered classroom. She perceived that a large percentage of the day would be organized around reading, writing, and mathematics activities.

One of the advantages of such instruction, according to this teacher, was that the approach was extremely motivating for the children. She stated that extrinsic rewards still had to be provided, as a few children would choose to do nothing in such a set-up if left unrewarded. Another named advantage included the idea that student/student interactions were more positive in a child centered classroom. The children showed a greater willingness to help each other and to share ideas.

The topic of the Department of Education authorized textbooks and guides generated a great deal of conversation during the interview. The teacher indicated that textbooks

play a very small role in the child centered approach but suggested that the curriculum guides are more useful as they provide a list of objectives that are appropriate for children at each grade level. This teacher felt that the guidebooks accompanying the various programs were also useful in that they provided a profusion of activities that teachers could refer to when designing learning experiences for children with a wide range of abilities.

Regarding the role of the teacher in the child centered classroom, she believed that the role would be more of a facilitative one, that is to say, the teacher would be there to help children who were encountering difficulty with a particular concept.

In relation to play in the classroom, the teacher dismissed the idea of rambunctious playground type activity but suggested that activities such as manipulating concrete materials in math, and completing tasks at the various learning centers, might be considered play. She noted the fact that children labeled these things play possibly because they considered them to be fun and unstructured. The interview concluded with the teacher commenting that she may have a lot of misunderstanding concerning the meaning of play but added that any activity the children expressed enjoyment towards fell into the realm of her definition of play.

Interview 5 - Grade Three teacher.

The teacher who participated in this interview regarded her own classroom as child centered. She talked about using the child as the focus of her program, and being very flexible in her programming. If she found, for example, the children were not interested in pursuing an activity she had planned for the day, she would be willing to change and go along with some of the children's ideas. She pointed out that a large part of child centeredness involves being responsive to children's interests and using such interests as the basis for learning experiences.

This teacher viewed her role to be of a facilitative nature, one which saw her primarily concerned with challenging children's thinking. This teacher identified a number of instructional practices she currently employs in her classroom that she considers child centered. These included the use of concrete learning materials, development of themes on topics children have expressed an interest in, extensive use of varied grouping strategies, interdisciplinary learning, field trips, utilization of resource people, and planning for individual rates of learning.

She felt that the extent to which this approach has been adopted around the province is almost nil. A number of reasons were provided for this opinion. One is that she believes teachers lack a background in the principles of child development, a background she perceives to be vital if

teachers are to successfully implement child centered instruction. Another is that the large number of children in some classrooms makes it extremely difficult for teachers to arrange small group activities and instruction of an individualized nature. Several others included lack of funds for purchase of materials, lack of flexibility on the part of teachers to extend instruction into the community, and finally a lack of administrative support at the school level.

This teacher criticized a number of factors she perceived to be a deterrent to child centered instruction. Among these were such practices as grade retention and a textbook coverage approach to curriculum.

She viewed the learning of skills such as reading, writing and mathematics as important to child centered instruction and drew attention to the importance of having some "standards" in place so that teachers would not be left without a sense of direction. For this purpose, she stated, teachers should look to the curriculum guide for support and to obtain an indication of the appropriate objectives for the various grade levels.

When questioned about the use of textbooks and the teachers' guides which frequently accompany these texts, this teacher insisted they would be used very flexibly in the child centered classroom. She spurned the use of textbooks that had all children in the classroom working on the same page. She indicated that she uses the guides strictly on a referral

basis, for example, if she wants an idea for teaching a particular skill.

The interview concluded with a discussion of play. The teacher addressed the phenomenal motivation for learning that she perceives play to create. She ascribed to the view that a substantial amount of play would be taking place in the child centered classroom. Children working with manipulatives in math, paints at the art center, role playing, creating with play dough, dramatizing a story and the like would be common sights in such a classroom. In conclusion, she stated her conviction that child centered instruction would become more of a reality if teachers sat back and observed the children they taught--observed how they learn.

Summary of interviews.

A review of the interviews indicates that teachers have many common perceptions regarding child centered instruction. Interdisciplinary learning, play, whole language, the thematic approach, small group instruction, and the extensive use of manipulative materials were repeatedly listed among the instructional strategies that teachers feel typify this approach.

There was a strong consensus among the interviewees on the need for a focus on the basic skills in a child centered classroom. Basic skills were most often referred to as reading, writing, and mathematics. In this light, the

curriculum guides authorized by the Department of Education were viewed as being a valuable resource. Most teachers agreed that these guides would provide an appropriate list of objectives for each grade level and, hence, ensure that some measure of consistency, in terms of standards, would exist around the province.

In contrast, authorized textbooks were judged as a resource which would have a very limited use in the classroom. The general opinion expressed was that such books would be used less than half the time and even then on a selective basis.

Collectively, the teachers held very similar beliefs regarding the factors they believe operate against the implementation of child centered instruction. Among those frequently named were large pupil/teacher ratios, inadequate amounts of time for preparation, and limited funds. The reverse factors were listed as being supportive.

Most teachers in the interview sample ascribed to the importance of play in the child centered classroom. Free exploration with manipulative materials and varied choices in activities were labelled as play-like although several of the teachers expressed an uncertainty as to what the concept of play actually means.

Summary

This chapter consisted of a presentation of the findings which were derived from the data analysis. It delineated the major perceptions teachers hold of child centered instruction. Their perceptions of the following areas, as each pertains to child centered instruction, were ascertained:

- curriculum goals,
- organization of the learning environment,
- instructional strategies,
- role of the teacher,
- their vision of what a child centered classroom would be like,
- extent to which adoption has occurred,
- child centered aspects of their own classrooms,
- factors supportive and non-supportive of implementation.

The results were presented in tabular form and discussed. A number of additional findings were presented that resulted from a breakdown of the variables of teaching experience, present teaching assignment, number of students in class, and training orientation. The chapter concluded with a summary of the five teacher interviews.

The final chapter will present a brief overview of the research purposes and the methodology. It will present a more detailed discussion of the results, a summary of the con-

clusions, and a list of recommendations based on the aforementioned findings. The chapter will conclude with a number of implications for future research.

CHAPTER V

Summary, Conclusions and Recommendations

This concluding chapter contains a summary of the research purposes and the methodology. General conclusions are presented and discussed. Recommendations for action, as well as implications for future research, are presented.

Summary

Research Purposes

The general purpose of the study was to gain an increased understanding of the concept, child centered instruction. Specifically, the study was conducted to obtain answers to the following questions:

1. What are the major features of child centered instruction as delineated by the literature including the provincial curriculum documents and resources?
2. What curriculum goals do teachers perceive to be important to child centered instruction?
3. What factors do teachers regard as being important considerations when organizing the learning environment for instruction in a child centered classroom?
4. What instructional practices, as perceived by teachers, are illustrative of child centered instruction?
5. What factors do teachers identify as important to

the role of the teacher in a child centered classroom?

6. What degree of congruence exists between the practices identified as child centered in the literature (including the authorized curriculum guide and resources) and teachers' perceptions of child centered instruction?

7. To what degree do teachers perceive child centered instruction to be implemented?

8. What factors do teachers consider to be supportive of the implementation of child centered instruction?

9. What factors are viewed by teachers as being non-supportive of the implementation of child centered instruction?

Methodology

The final sample consisted of 43 teachers in a select school district of Newfoundland and Labrador. The study had two components: a questionnaire and an interview. The questionnaire was used to determine the teachers' perceptions of child centered instruction relevant to specific dimensions, while the interview was used to provide further elaboration on specific sections of the questionnaire. Data from the closed form items were coded for use in a computer program. Subsequently, descriptive and statistical analyses were performed on Parts I to V of the questionnaire. The data from the open-ended section of the questionnaire, Parts VI to VIII, were quantified by the researcher, who reviewed the answers to

each of the questions and classified the similar responses into a number of categories.

Conclusions

The main conclusions arising from this study will be discussed in relation to the proposed research questions. There will be, however, one exception. The responses relevant to a discussion of the degree of congruence that exists between the practices identified as child centered in the literature (including the provincial curriculum documents and resources), and teachers' perceptions of child centered instruction will be interwoven, where applicable, into the discussion of the major research questions.

1. What are the major features of child centered instruction as delineated by the literature, including the provincial curriculum documents and resources?

Table 40 presents a summary of the main points brought out in each section of the literature review. The points relevant to each section of the questionnaire are noted.

2. What curriculum goals do teachers perceive to be important to child centered instruction?

The data obtained from the study indicate that there is general agreement among primary teachers on the goals they perceive to be important in the child centered classroom.

Table 40
 Summary Table of Literature Findings

	The Learning Environment	Instructional Strategies	Role of the Teacher	Curriculum
Curriculum Documents and Resources	<ul style="list-style-type: none"> •filled with concrete materials •includes learning centers •flexible spatial arrangements •extends beyond classroom •evolving •rich, supportive environment 	<ul style="list-style-type: none"> •active learning opportunities •resource-based teaching/learning •flexible grouping practices •individualized instruction •integration of common objectives •theme approach 	<ul style="list-style-type: none"> •teacher as facilitator of learning •promotes positive self-concept •promotes learning by doing •regularly communicates with parents 	<ul style="list-style-type: none"> •differential and interdisciplinary learning must be made relevant •focus on "how to learn" •concerned with all areas of development
Play	<ul style="list-style-type: none"> •encourages play •provides opportunity for social interaction •provides learning centers as starting point for play 	<ul style="list-style-type: none"> •use of play as a medium for active learning •time for unhurried learning 	<ul style="list-style-type: none"> •provides "messing about" times for children •recognizes and supports value of play 	<ul style="list-style-type: none"> •promotes skill building in curriculum areas •used to promote holistic learning •meaningful
Education as Process	<ul style="list-style-type: none"> •activity centered •experiences for first-hand •provides for play •rich in resources, toys and materials 	<ul style="list-style-type: none"> •flexible use of materials, time and space •resource-based teaching •active learning •collaborative learning 	<ul style="list-style-type: none"> •teacher as a partner in learning •teach children, not subjects •creating a child-centered environment 	<ul style="list-style-type: none"> •determined by needs and interests of children •develop maximum potential of children
Constructivism	<ul style="list-style-type: none"> •encourages risk-taking •emphasis on meaning •ability to learn on their own 	<ul style="list-style-type: none"> •discovery learning •errors as part of learning •use of high level questioning 	<ul style="list-style-type: none"> •recognize children construct their own knowledge •follows, not leads •helps children move from novice to expert learner 	<ul style="list-style-type: none"> •focus on understanding as opposed to superficial skills

	The Learning Environment	Instructional Strategies	Role of the Teacher	Curriculum
Children and Change	<ul style="list-style-type: none"> • promotes active learning • provides choices • extends beyond classroom 	<ul style="list-style-type: none"> • activity-based • collaborative learning • individualized learning • flexible time and curriculum 	<ul style="list-style-type: none"> • views children as lifelong learners • gives children autonomy • collaborative 	<ul style="list-style-type: none"> • focus on child • process oriented • active and experiential • interdisciplinary
Historical Views	<ul style="list-style-type: none"> • rich in sensory materials 	<ul style="list-style-type: none"> • play experiences • activity-based 	<ul style="list-style-type: none"> • recognize children as agents of their own learning • consultative and guiding 	<ul style="list-style-type: none"> • must originate from child • focus on development of whole child
Theory into Practice	<ul style="list-style-type: none"> • rich in resources • active and busy • supportive 	<ul style="list-style-type: none"> • interdisciplinary learning • thematic work • learning centers • group learning 	<ul style="list-style-type: none"> • facilitator • uses varied instructional approaches 	<ul style="list-style-type: none"> • development of basic skills • education of the "whole" child

Much of this agreement centers on goals such as the need to focus on all the developmental areas, to promote active learning, to design curriculum around the needs and interests of children and to work towards a balance in the product versus process approaches.

One response in this section that warrants further discussion concerns the issue of a differential curriculum. It is interesting to note that a large percentage (72%) of the teachers perceived that it would be important to promote such a curriculum. This view appears to be in direct contrast with the ideas currently advocated in much of the early childhood literature. This literature, according to Blenkin and Kelly (1987) and NAEYC (1989), regards this approach as inappropriate to the way in which young children do their learning. In fact, throughout the literature review undertaken for this study, interdisciplinary learning, as opposed to a differential curriculum, was identified as an essential component of child centered instruction. While the teachers strongly supported discrete subject teaching they also perceived the role of interdisciplinary learning as important. In fact, 81% felt teachers should have this type of learning occurring in their class 40-100% of the time. The research findings obtained from the data provide no definitive role for either discrete subject or interdisciplinary learning.

Perhaps this finding results from the fact that Children Learning, the provincial curriculum handbook, does not

advocate one approach over the other. Instead, it holds the view that both have a place in the curriculum. On the other hand, the Program of Studies, which provides descriptions for each subject area as well as recommended time allotments, appears to be supportive of discrete subject teaching. Likewise, so does the Department's policy of providing a textbook for individual subject areas. Such practices appear to be in direct conflict with the interdisciplinary approach currently promoted by proponents of child centered instruction. The discrepancy between the views promoted by the Department of Education and those promoted in the current literature could be confounding this issue for teachers.

Several other findings from this section are noteworthy. The results of the analysis of variance which cross-tabulated curriculum goals with numbers of years of teaching experience, found that the teachers who had taught for 15 years or less placed a significantly higher degree of importance on the goal of promoting learning through frequent opportunities to interact with concrete learning materials than did the teachers who had taught longer than 15 years. This might be related to the fact that the younger teachers began their career at a time when many of the programs, in particular science and mathematics, were placing an increasingly larger emphasis on concrete learning.

One other difference was related to years of teaching experience. The data indicated that teachers who had taught

for 15 years or less placed a significantly higher degree of importance on the goal of ensuring that children master the objectives outlined in the provincial curriculum documents than did their counterparts. Perhaps the more experienced teachers have moved away from the guides and are now setting their own objectives based on their experiences with the children.

Two other differences with respect to perceived curriculum goals were evident when a comparison was made with class size. The teachers who had fewer than 20 children placed a significantly higher degree of importance on the goal of helping children acquire the body of knowledge they will need for elementary school than the teacher who had class enrolments exceeding 20. This could possibly be linked to a commonly held view that greater academic learning takes place when lower pupil/teacher ratios exist.

Teachers with more than 20 students in their class placed a significantly higher degree of importance on the goal of promoting learning through interaction with peers. This may be connected to the fact that with large class sizes the amount of time a teacher can spend with individual children is significantly reduced. A number of teachers alluded to this in their open-ended responses and made comments concerning the practice of utilizing academically advanced children as teacher aides.

3. What factors do teachers regard as being important

considerations when organizing the learning environment for instruction in a child centered classroom?

The data from this part of the questionnaire indicate that teachers' perceptions of how the learning environment in the child centered classroom should be organized are very similar. Among the practices most commonly identified by teachers in the study as being appropriate to the learning environment are:

1. Classroom displays comprised of equal amounts of commercial, teacher made, and child produced materials.
2. Instruction extended outside the classroom to the community.
3. Free movement of children.
4. Varied grouping strategies.
5. Extensive use of materials matched to the developmental levels of children.
6. Materials displayed at children's eye level.

The practices considered by teachers to be child centered, with one minor exception (classroom displays), are also viewed as such in the literature. The literature, however, appears to place a larger emphasis on classroom displays being largely made up of children's work than do the teachers. Likewise, there was a high degree of consensus among teachers on the practices they viewed as inappropriate. These included:

1. Formal arrangements of seating with desks in rows.

2. Extensive use of worksheets and workbooks.
3. Segregation of special needs children.

These practices were also labeled as inappropriate in the literature. NAEYC (1989), for example, states: "Care should be taken to avoid isolating special needs children in a segregated classroom" (p. 77). NAEYC, along with Schwartz and Pollishuke (1990), suggest that neither row by row seating arrangements nor drill with worksheet and workbook activities are child centered practices.

It was interesting to note that teachers were split on the issue of whether children should decide where they want to sit. A little more than half (56%) felt that children should decide where they want to sit, while the remaining deemed such a practice inappropriate. While this finding is noteworthy, it is not surprising when looked at in the context of the responses teachers made to the grouping question. The grouping arrangement most often selected (41% of the teachers) was needs: remediation/enrichment. The make-up of groups such as this would likely be a teacher decision.

This relates to another finding, again linked to grouping practices. Almost half of the teachers (41%) stated that in a child centered classroom, children would usually sit in needs-based (remediation/enrichment) groups. Only about a quarter of the teachers (24%) identified heterogeneous grouping as the usual form of grouping. This is somewhat different from the perspective found in the literature.

Schwartz and Pollishuke (1990), in their book Creating the Child-Centred Classroom, as previously noted, maintain that heterogeneous grouping is the most effective grouping strategy to meet the needs of children. These authors do, however, acknowledge that other forms of groupings have a place in the child centered classroom. They state: "Homogeneous groupings do have a place in the child centered classroom as forums for teaching at the point of need" (p. 19).

The questionnaire item relevant to grouping asked respondents to choose only one form of grouping. The subsequent interviews suggested that teachers found it difficult to select any one grouping strategy over the other as they perceived them all to be appropriate. Throughout the course of the interviews, most teachers repeatedly stated that they use all types of grouping depending on the needs arising in their class. One example was given of the use of homogeneous grouping to pull together a group of children who were having difficulty with a particular math concept.

An analysis of variance in relation to number of years teaching, orientation of training, grade presently teaching and the number of students in a class was conducted. With respect to teachers' perceptions of the learning environment in a child centered class only one difference was found. This difference was related to the years of experience variable. The teachers who taught for a period of time greater than 15

years attached a significantly greater degree of appropriateness to the use of worksheets and workbooks in the child centered classroom. This may be linked to the idea that the older teachers may tend to use more traditional type instructional strategies.

4. What instructional practices, as perceived by teachers, are illustrative of child centered instruction?

The data from this part of the study indicated that a teachers' repertoire of teaching strategies in the child centered classroom is perceived to be varied. Among the strategies frequently considered by the surveyed teachers to be appropriate to child centered instruction were:

1. Thematic work on topics in which children have expressed an interest.
2. Interdisciplinary teaching.
3. Utilization of open-ended questioning techniques.
4. Promotion of play through use of manipulative materials and free choice activity.
5. Whole group, small group and individual activities.
6. Use of external rewards to enhance motivation.
7. Large blocks of time assigned to activities.

While teachers were fairly agreeable as to what instructional strategies belonged in a child centered classroom, they were also agreeable on the strategies they deemed inappropriate. These included:

1. Reading taught as a separate subject.

2. Children working in centers only when they have completed all their assigned activities.
3. Extensive use of teacher demonstrated science lessons.
4. Weekly spelling tests.
5. Utilization of rewards and punishments as preferred discipline methods.

One area in which teachers' perceptions differed from the literature was concerned with the use of external awards. While one of the largest compilations of early childhood literature (NAEYC) places the use of external rewards under its list of inappropriate practices, a substantial number of teachers (67%) perceived such rewards to be appropriate for use in the child centered classroom. This finding was similar to the interview data. All interviewed teachers considered the use of external rewards to be appropriate. Most linked the rationale for using such a practice to the difficulties they encounter in motivating children to complete their work.

No clear direction was obtained from the study regarding the usage of curriculum guides to plan instruction. About 50% of the teachers stated they would envisage the guides being used about half the time, while the remaining percentage stated they would be used more than half the time. Most often teachers suggested they would be used as a source from which grade level objectives could be obtained.

It is evident from the responses to both the open-ended

and the closed questions of the interview that teachers perceive the learning of the 3 Rs (reading, writing, and mathematics) to be of prime importance in the child centered classroom.

One last finding to be elaborated on is in reference to textbook usage. Teachers (71%) indicated that they would see such books being used less than half the time. This leads the researcher to question the validity of the Department of Education's policy of supplying textbooks en masse to school boards. Given the relatively low priority teachers assign to the use of textbooks, maybe the pilot begun by the Department approximately two years ago, in which select school boards are reimbursed funds when they do not request a full allotment of textbooks, is a judicious one. Perhaps the provision of grants in lieu of textbooks, will do more to foster the growth of child centered instruction as recommended in the provincial primary curriculum guide.

When an analysis of variance was conducted to determine whether the number of years teaching would make a difference in the instructional strategies deemed by teachers to be important in the child centered classroom, a number of significant differences were uncovered. The teachers with 15 or less years teaching experience attributed a significantly greater degree of appropriateness to maintaining a balance between whole group, small group and individual working times in the child centered classroom than did the more experienced

teachers. The less experienced teachers also affixed a significantly higher degree of appropriateness to the use of varied grouping strategies. This may indicate that the younger teachers are more open to flexibility in instructional methods.

The teachers with more than 15 years of teaching experience placed a significantly higher degree of appropriateness, than did their counterparts, on the use of computers by teachers to reinforce previously taught skills. This could be explained by the fact that, to date, computers have not been widely used in the primary schools, so that many of the older teachers would have had little or no experience with using the computer as an instructional tool. In contrast, the younger group may have had more exposure in university courses to the variety of ways in which computers can be used.

Only one other difference showed up in the completed analysis of variance. This difference occurred with respect to present teaching assignment. It was found that the grade two teachers placed a significantly greater degree of appropriateness on the administration of spelling tests than the other two grades. A partial reason for this finding might be linked to the fact that the Department of Education authorizes a formal spelling program beginning at grade two.

5. What factors do teachers identify as important to the role of the teacher in a child centered classroom?

Overall, there was an overwhelming perception that the

teacher in the child centered classroom would act as a catalyst in the learning process. The teacher was viewed as a facilitator who circulates around the classroom, asking provocative questions and in general guiding children's learning. Certain trends in teachers' perceptions were discernible: (a) providing children with choice; (b) utilizing positive guidance techniques; (c) promoting both creative and divergent thinking; (d) planning play opportunities; (e) focusing on development of self-concept; (f) organizing curriculum on the basis of needs and interests; and (g) utilizing instructional strategies suited to the different learning styles and developmental levels of the children.

These findings indicate that a high degree of match evidently exists between teachers' perceptions of the teacher's role in the child centered classroom and the literature. Much of the literature, Day (1975), Blenkin and Kelly (1987), NAEYC (1989) and Schwartz and Pollishuke (1990) presents the same profile of the teacher's role as did the research data.

There was also strong agreement on the practices teachers did not associate with the role of the teacher in a child centered classroom. The first of these centered on parental involvement. The majority of teachers deemed it inappropriate to limit interaction with parents. This view is certainly supported in the literature. A recent book, for example, by Schwartz and Pollishuke (1990) devotes a whole chapter to the

important role parental involvement plays in the creation of child centered classrooms. Children Learning, the provincial primary handbook, also assigns a complete chapter to the importance of parent-school relations.

The second point of strong agreement pertained to the measurement of students' progress. The majority of teachers considered it inappropriate to define student progress in terms of the criteria outlined in the Department of Education documents or in comparison with other children. Eighty-eight percent of the teachers also considered it inappropriate to assign numerical and/or letter grades to children.

These findings are again consistent with what is being advocated in the literature. Children Learning, the provincial primary handbook, emphatically states: "... descriptive comments are best for primary school reports" (p. 87). NAEYC (1989) also supports anecdotal reporting and repudiates use of numerical and/or letter grades, and comparative evaluation strategies.

When an analysis of variance was completed, several differences were seen in relation to years experiences, grade presently teaching, pupil/teacher ratio, and orientation of training.

The teachers with more than 15 years experience attached a significantly greater degree of appropriateness to limiting interactions with parents to the formal reporting periods, than did the teachers who had taught less than 15 years. Con-

versely, teachers with less experience attributed a significantly greater degree of appropriateness to the provision of regular opportunities for parents to participate in classroom activities. This finding could be linked to a greater propensity on the part of the younger teachers to actively encourage parental involvement.

When responses were compared on the basis of the grade teachers were presently assigned to, three differences surfaced. Grade two teachers, substantially more than teachers of the other grades, placed a significantly higher degree of appropriateness on telling children when they are wrong and correcting their errors.

The grade three teachers placed a significantly lesser degree of appropriateness on the practice of employing instructional strategies adapted to the children's learning styles and developmental level than did either of the other two grades. The teachers at the grade three level placed a significantly higher degree of appropriateness on the practice of assigning numerical and/or letter grades to children. These findings may be linked to the pressure primary teachers feel is exerted upon them by the elementary school. Assignment of numerical and letter grades is the norm in elementary school. Likewise, it would be expected that elementary schools are not as varied in their use of instructional strategies as the primary teachers. It could be conceivable that grade three teachers who have children moving directly

into the elementary school are more prone to adopt strategies that complement those used in elementary than teachers at the grade one and two levels.

Several other differences in responses were noted when a comparison was done with pupil/teacher ratio. The teachers who had more than 20 students in their class affixed a significantly greater degree of appropriateness to the provision of time for exploration with materials. The teachers with less than 20 students attributed a significantly higher degree of appropriateness to setting up a broad range of activities for children to select from than did teachers with more than 20 students. It is probable that the teachers with fewer students felt that smaller classes would be more conducive to varied activities.

6. To what degree do teachers perceive child centered instruction to be implemented?

The vast majority of teachers (64%) perceive that this is an approach which teachers are currently working towards. A small fraction of the teachers (19%) allowed that this approach was used extensively. Given the fact that many of the teachers, both in this study and in the recent survey completed by the provincial Primary Teachers' Council, considered that they were working with minimum materials, insufficient preparation time and a large pupil/teacher ratio, this finding appears to be borne out. Another possible consideration is that the Department of Education at the

beginning of the 1991 school year published a curriculum handbook that lends some common directions to primary education in terms of philosophy and practices. A final influencing factor could be related to teacher training. In this study, 61% of the teachers indicated that they had not completed any recent training. It can be assumed that such training would be directed to currently advocated approaches such as child centered instruction.

7. What factors do teachers consider to be supportive of the implementation of child centered instruction?

In general the respondents felt that there were a number of prevailing factors in the educational system that were directly supportive of child centered instruction. These factors were in most respects a reverse of the ones found to be non-supportive. An abundance of materials, sufficient preparation time, and small pupil/teacher ratios were identified by 90% or more of the respondents as being supportive of child centered instruction. Again, given the nature of the literature on early childhood education, this finding is not unexpected. Schwartz and Pollishuke (1990), in their description of the child centered classroom, provide quite lengthy lists of materials and resources needed for various learning centers. As stated previously, both NAEYC (1989) and NAESP (1990) stress the need for small pupil/teacher ratios. Even a cursory glance at the instructional approaches deemed appropriate to the child centered classroom (learning centers

activity-inquiry method, individual activities) points to the need for large blocks of time for organizing instruction.

8. What factors are viewed by teachers as being non-supportive of the implementation of child centered instruction?

In general there was a high degree of unanimity among teachers regarding factors they considered to be adversely affecting the implementation of this approach. Three factors--large pupil/teacher ratio, insufficient materials and lack of preparation time--were identified as such by over 80% of the respondents. These results are not particularly surprising. Current research (NAESP, 1990) for example, recommends a pupil/teacher ratio of 15:1 for all primary grades (Grades I-III). The literature specific to early childhood education, NAEYC (1989), is replete with references to the need for a wide array of concrete learning materials in the classroom. Concerns related to class size in this province have led to the recommendation of the Newfoundland Teachers' Association, that school boards set up committees to examine and make recommendation regarding class size.

In an effort to identify the concerns of primary teachers, the provincial Primary Teachers' Council recently surveyed primary teachers across the province. One finding reported in this survey was that teachers are very concerned with lack of preparation time for developing learning center materials, planning themes and so forth. In fact, the idea of

a planning day a month was suggested.

One interesting finding is that over half of the teachers (58%) considered the Department of Education to be hindering the implementation of this approach. When responding to this open-ended question, teachers commented on the Department's policy of supplying a single textbook for each curriculum area. They felt that this policy promotes the use of discrete subject teaching and consequently inhibits the use of an interdisciplinary approach which is advocated by the proponents of child centered instruction. It should be noted that a memorandum dated September 20, 1991, on the subject of interdisciplinary learning, was sent to all district superintendents by the Department of Education. This memorandum sought to clarify the Department's position on such learning. The point that all learning experiences need not be exclusively subject oriented was made. Interdisciplinary learning in the form of themes and field trips was stressed although it was emphasized that such an approach demands careful planning on the part of the teacher.

A number of recent initiatives by the Department of Education, most notably the authorizing of an art textbook for every primary child, was seen to contravene the view of active learning. One teacher noted that she has 25 children in her class and would have preferred to use the money spent on books to purchase the paint, paper and other materials that would get the children "doing" art.

One other point that was made with respect to the Department of Education focused on its promotion of a graded system. Some teachers expressed the view that if child centered instruction is to become a reality an ungraded primary system is needed.

Recommendations for Action

1. The Department of Education, in cooperation with school districts, should begin an examination of the role of its authorized resources and curriculum guides in supporting the concept of child centered classrooms.

2. The Department of Education should rethink its current policy of supplying textbooks en masse to school districts. The initiative begun several years ago, in which selected school boards were provided funds when they did not request the full allotment of textbooks, appears to be a practice worth continuing.

3. The Department of Education should provide financial assistance to boards to help with the creation of district resource centers.

4. The Department of Education recently supplied two videos to all school districts relevant to child centered instruction. These videos produced in Manitoba make for worthwhile viewing. Nevertheless, the need exists for more provincially produced materials.

5. The Department of Education supplied kits of materials for primary and elementary science programs some 20 years ago. In recent years it has also supplied manipulative materials for mathematics. There is a need to extend this commitment and provide ongoing funding for materials, particularly in the curriculum areas of science and mathematics.

6. The Department of Education needs to provide more guidelines to teachers on interdisciplinary teaching techniques.

7. The Department of Education should compile a bibliography of resource material pertinent to child centered instruction.

8. A copy of Creating the Child-Centred Classroom by Susan Schwartz and Mindy Pollishuke (1990) should be supplied to every primary teacher in the province, either by the Department of Education or individual school boards.

9. School boards across the province should give consideration to varied inservice sessions--short courses on child centered instruction (theory into practice), teachers visiting other classrooms to observe child centered teachers in action, and extensive sharing sessions.

10. The comprehensive list of recommended materials developed by the Newfoundland Teachers' Association for kindergarten classes should be further expanded to include the primary grades.

11. The recommendation of the Newfoundland Teachers'

Association to school boards regarding the need to set up district committees for the purpose of investigating class size should continue to be implemented.

12. The provincial Primary Teachers' Council recently conducted a survey in which teachers identified insufficient preparation time as one of their concerns. The suggestion was made that teachers be given one planning day a month. This recommendation should be acted upon by the appropriate agencies.

Implications for Further Research

A number of areas for future work are suggested.

1. A significant finding of this study was that teachers consistently identified six indicators as being supportive in the process of implementing child centered instruction. On the contrary, they identified an absence of these factors as impediments to implementation. It is suggested that future research focus on the following:

An in-depth examination of one or all of the factors teachers perceive to be affecting the implementation of this instructional approach--insufficient preparation time, financial constraints, and large pupil/teacher ratios.

2. Another significant finding of the study was that

teachers, as well as the current literature, agreed that a child centered curriculum would be based on the needs and interests of children. This is supported by the following suggestion made by DeVries and Kohlberg (1987): "Much more practical classroom research is needed to develop recommendations to teachers about what content appeals to children's interests and stimulates constructive activity" (p. 382).

3. This study was limited to a small sample of teachers from one geographical area of the province of Newfoundland and Labrador. It would be worthwhile to use this model to replicate the study province-wide.

A comparative study encompassing teachers from primary schools all over the province would yield valuable data which would serve to further illuminate teachers' perceptions of child centered education.

4. A noteworthy finding of this study was that the literature, the provincial curriculum materials, and the teachers all made frequent reference to the role of the teacher as "facilitator of learning". It would be interesting for future research to direct thinking towards the following:

An identification of instructional strategies that teachers perceive as being supportive of their role as facilitators of learning.

5. During the interviews with teachers, the researcher observed that with respect to question nine concerning the work versus play dichotomy, there appeared to be a great deal of ambiguity among teachers. Future researchers could address the following:

An examination of teachers' perceptions of the role of play in the primary grades.

6. The results obtained from the review of the literature, the questionnaire data, and the interview, indicate that interdisciplinary programming is considered to be a highly valued criterion for child centered instruction. In fact, the majority of teachers from the sample held this perception. The goal of promoting discrete subject teaching was also given a high ranking by 72% of the teachers. Given that there appears to be an inconsistency in the two responses, an examination of the following would be appropriate:

Research designed to identify the respective roles of interdisciplinary learning and discrete subject teaching in the child centered classroom.

7. Small group activity was frequently identified as an important variable in child centered instruction. Bearing this in mind, future researchers could undertake the following task:

An in-depth examination of grouping strategies and

their role in the child centered classroom.

8. Extrinsic motivation was identified by teachers as being important to child centered instruction. Given this fact and the problem identified by the interviewees, namely, the difficulty associated with motivating children to learn, future study could focus on the following question:

A study of strategies used by teachers to motivate the learning of primary children.

9. Perhaps the biggest question that remains unanswered is:

A determination of the extent to which primary teachers have been able to put their beliefs concerning child centered instruction into practice.

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Videos

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- Managing the Learning Environment. (16 minutes). Available from Department of Education, St. John's, Newfoundland.
- In the Center of Things. (25 minutes). Available from Department of Education, St. John's, Newfoundland.
- Child's Play: The World of Learning. (30 minutes). Available from Department of Education, St. John's, Newfoundland.
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APPENDIX A
Teacher Questionnaire

TEACHER QUESTIONNAIRE

In an effort to obtain information regarding the characteristics of child centered education, a questionnaire has been devised. The questionnaire will seek information from primary teachers about the curriculum goals, the type of learning environment, the instructional strategies and the role of the teacher in a child centered classroom. There are no right or wrong answers, it is YOUR view of the practices that constitute child centered instruction that is being sought. It is important to answer every question. Only one response must be given to each statement. Several blank pages will be attached to the end of the questionnaire should you wish to provide additional details on any of the items.

Responses for Parts 1-5 of the questionnaire should be made by circling the appropriate code number. There are several minor exceptions which will require either a brief written response or simply a check mark.

Parts 6, 7, and 8 of the questionnaire include a number of open-ended questions. These questions will require a written response. It is recognized that these type of questions generally require a substantial amount of time to answer. However as they are extremely important to the study your cooperation in providing a response to each question will be greatly appreciated.

As a follow up to the questionnaire I wish to interview five teachers selected at random from the respondents. This interview will be approximately 45 minutes - 1 hour in length and will be related to the questionnaire. If you wish to participate in this part of the study, please indicate your response at the end of this page.

Please be assured that all responses to the questionnaire will be kept in strictest confidence. Your cooperation in completing this questionnaire will be greatly appreciated.

I wish to participate in the interview session _____

Signature

PART 1 TEACHER INFORMATION

PERSONAL DETAILS

1. Name (optional) _____

2. Sex	Female	1
	Male	2

3. TRAINING

(a) Formal Teacher Training	Primary Oriented . . .	1
	Elementary Oriented .	2
	Secondary Oriented . .	3
(b) Level of Teacher Certificate	Second Grade	1
	Third Grade	2
	Fourth Grade	3
	Fifth Grade	4
	Sixth Grade	5
	Seventh Grade	6
(c) Courses completed within the last two years.	1 - 2 Courses	1
	3 - 4 Courses	2
	More than 4	3
	No courses completed .	4
	within this period	

4. TEACHING EXPERIENCE

(a) Total Years _____	
Primary _____	
Elementary _____	
Secondary _____	
(b) Type of teaching experience	Single Grade _____
(Number of years)	Multigrade _____

5. PRESENT TEACHING ASSIGNMENT

(a) Grade presently teaching	_____
(b) Number of students in class	_____

PART 2 CURRICULUM GOALS IN THE CHILD CENTERED CLASSROOM

This section of the questionnaire lists a number of curriculum goals. Please rate each goal on the five point scale to indicate the extent to which you perceive each goal to be important to the creating of a child centered classroom. (The scales are: 1 - Not Important; 2 - Fairly Important; 3 - Important; 4 - Very Important; 5 - Essential.) It is important to answer all questions. The goals can be rated by circling the appropriate code number.

CURRICULUM GOALS IN THE CHILD CENTERED CLASSROOM	Not Important	Fairly Important	Important	Very Important	Essential
In a child centered classroom curriculum goals would focus on:					
(a) Promoting all aspects of development - physical, social, emotional, moral and intellectual	1	2	3	4	5
(b) Accepting that children generally proceed at their own pace of learning . . .	1	2	3	4	5
(c) Promoting of learning through frequent opportunities to interact with concrete learning materials, e.g., math manipulatives	1	2	3	4	5
(d) Developing a curriculum which has a major focus on academic growth	1	2	3	4	5
(e) Encouraging pupil choice in activities . . .	1	2	3	4	5
(f) Developing children's self-esteem	1	2	3	4	5
(g) Giving high priority to the learning of basic skills and concepts	1	2	3	4	5
(h) Helping children acquire the body of knowledge they will need for elementary school	1	2	3	4	5

	Not important	Fairly important	Important	Very important	Essential
(i) Organizing instruction based on the interests of the children	1	2	3	4	5
(j) Ensuring that children master the objectives outlined in the provincial curriculum documents	1	2	3	4	5
(k) Promoting independent learning	1	2	3	4	5
(l) Developing in children positive feelings towards learning	1	2	3	4	5
(m) Promoting a curriculum which is responsive to the developmental levels of individual children	1	2	3	4	5
(n) Accepting that knowledge is tentative and subject to change	1	2	3	4	5
(o) Promoting a differential curriculum e.g., blocks, periods of time spent on individual subject areas	1	2	3	4	5
(p) Designing teaching strategies that emphasize integrating the various curriculum areas e.g., theme-centered units of learning involving two or more subject areas	1	2	3	4	5
(q) Emphasizing process learning as opposed to the product	1	2	3	4	5
(r) Developing of thinking abilities	1	2	3	4	5
(s) Equipping children with skills necessary for lifelong learning	1	2	3	4	5
(t) Promoting learning through interaction with peers	1	2	3	4	5
(u) Creating a classroom environment that provides children with frequent opportunities for exploration e.g., experimenting with science objects to see what can be done with them	1	2	3	4	5

PART 3 ORGANIZING THE LEARNING ENVIRONMENT FOR INSTRUCTION IN A CHILD CENTERED CLASSROOM

This section of the questionnaire is designed to determine the organizational nature of a classroom which is child centered. Please rate each statement to indicate its appropriateness to the learning environment of a child centered classroom. The statements a - e should be rated by circling the appropriate response code number on the four-point scale. (The scales are: 1 - Highly Inappropriate; 2 - Inappropriate; 3 - Appropriate; 4 - Highly Appropriate.) The other statements (p - s) can be rated by circling the appropriate code number.

It is important to answer every question.

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
In a child centered classroom the learning environment would be structured so that:				
(a) There is a place within the classroom where children can gather for whole class activities	1	2	3	4
(b) There is a formal arrangement of seating with desks and tables placed in rows	1	2	3	4
(c) Children usually decide where they want to sit within the classroom	1	2	3	4
(d) Children contribute their ideas to classroom displays	1	2	3	4
(e) The learning environment extends out of the classroom e.g., field trips to community, research projects at the library	1	2	3	4

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
(f) There are specific areas of the classroom where children can self-select activities	1	2	3	4
(g) A variety of concrete materials e.g., manipulative aids, teacher made games, toys, puzzles, blocks and art materials are available	1	2	3	4
(h) Children's work e.g., writing, artwork and special projects occupy a prominent position within the classroom	1	2	3	4
(i) The most frequently used resources are the materials authorized by the Newfoundland and Labrador Department of Education	1	2	3	4
(j) A wide variety of resources are found in the classroom e.g., maps, globes, audio-visual materials, children's books	1	2	3	4
(k) Materials used in the classroom consist mostly of worksheets and workbooks	1	2	3	4
(l) Special needs children regularly receive their instruction in a segregated classroom	1	2	3	4
(m) Equipment and materials are open-ended and lend themselves to a variety of uses e.g., science materials, paints	1	2	3	4
(n) Materials are at children's eye level	1	2	3	4
(o) Classroom materials and equipment are matched to the developmental levels of the children	1	2	3	4

- (p) In a child centered classroom seating would mostly be arranged so that children sit: (Please select only one response.)

Separately	1
Separately and in pairs	2
In pairs	3
In pairs and in groups of seats	4
In groups	5

- (q) Children usually sit in groups: (Please select only one response.)

Needs (remediation/enrichment) based	1
Friendship based	2
Interest based	3
Ability based (heterogeneous)	4
Ability based (homogeneous)	5

- (r) Movement in a child centered classroom is best characterized by: (Please select only one response.)

No movement permitted	1
Movement only during learning center work	2
Only at times specified by the teacher	3
Only during free times e.g, recess time, lunch time, upon completion of work	4
Free movement of children	5

- (s) Classroom displays are best characterized as: (Please select only one response.)

Largely a display of commercially purchased materials	1
Mostly work completed by the children	2
Equal amount of commercial and teacher made displays	3
Mostly teacher made materials	4
Equal amount of commercial, teacher made, and child produced materials	5

PART 4 INSTRUCTIONAL STRATEGIES

The following section of the questionnaire will examine the instructional strategies in a child centered classroom. Please rate each strategy to indicate its appropriateness in relation to child centered instruction. Statements a-s should be rated by circling the appropriate response code number on the four - point scale. (The scales are: 1 - Highly Inappropriate; 2 - Inappropriate; 3 - Appropriate; 4 - Highly Appropriate.) The other statements t - v can be rated by circling the appropriate code number.

It is important to respond to every question.

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
Instruction in a child centered classroom would be characterized by:				
(a) A high degree of compulsory activities the children must complete	1	2	3	4
(b) A balance between whole group, small group and individual working times	1	2	3	4
(c) Uninterrupted periods of time during the day when children engage in activities of their choice	1	2	3	4
(d) Children frequently engaged in self evaluation of their work	1	2	3	4
(e) Children given daily opportunities to manipulate and explore objects such as arts and crafts materials, games	1	2	3	4
(f) Reading taught as a separate subject during a scheduled time	1	2	3	4

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
(g) Children working in learning centers only when they have completed all assigned activities	1	2	3	4
(h) Computers used mostly as a tool to reinforce previously taught skills	1	2	3	4
(i) Themes selected on the basis of specific interest expressed by the children	1	2	3	4
(j) External rewards such as stickers used generally as motivation tools	1	2	3	4
(k) Timetables generally used to organize the week's activities	1	2	3	4
(l) Science lessons consisting mainly of watching teacher demonstrations	1	2	3	4
(m) The regular use of grouping strategies e.g., cooperative learning groups, peer teaching groups, interest groups	1	2	3	4
(n) Use of open ended questions e.g., What would happen if?	1	2	3	4
(o) Children being rarely permitted to help each other with classroom activities	1	2	3	4
(p) Rewards and punishments used as the preferred methods of discipline	1	2	3	4
(q) Use of teaching strategies consistent with an interdisciplinary approach e.g., theme-centered units involving two or more subject areas	1	2	3	4

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
(r) Spelling tests administered weekly	1	2	3	4
(s) Children being encouraged to develop responsibility and self-discipline	1	2	3	4
(t) In your opinion, what percentage of time would be allotted to the following activities in a child centered classroom? The total should work out to be 100% although you may consider some activities not a part of child centered instruction and hence not include them in a percentage. (Please use the six day cycle as a guide to your calculations.)				

	Percentage of time
(a) Teacher directed lessons to the class as a whole	_____
(b) Teacher working with small groups and individuals	_____
(c) Paper and pencil exercises to be completed by the whole class	_____
(d) Children working cooperatively in groups, on activities of their own choice	_____
(e) Children working cooperatively in groups, on activities assigned by the teacher	_____
(f) Children working at their own pace, on individual activities assigned by the teacher	_____
(g) Children working individually at their own pace, on self selected activities	_____

Total 100%

- (u) Please indicate the approximate time teachers in a child centered classroom would spend on the following activities. The total should work out to be 100%. (Use the six day cycle as a guide to your calculations.)

Separate subject learning	_____
Bathroom/water drinking routines e.g., scheduled line up time for bathroom and drinks	_____
Interdisciplinary learning experiences e.g., focus on objectives from two or more curriculum areas	_____

- (v) To what extent would the curriculum guides published by the Department of Education be used? (Please select only one response.)

Not at all	_____
Less than half the time	_____
More than half the time	_____
Virtually all the time	_____

- (w) To what extent would the textbooks authorized by the Department of Education be used in a child centered classroom? (Please select only one response.)

Not at all	_____
Less than half the time	_____
More than half the time	_____
Virtually all the time	_____

PART 5 THE ROLE OF THE TEACHER IN A CHILD CENTERED CLASSROOM

In this section of the questionnaire you will be asked to give your opinion on the teacher's role in a child centered classroom. Please indicate the degree of appropriateness of the following aspects of a teacher's role in a child centered classroom by circling the appropriate number on the four point scale. (The scales are: 1 - Highly Inappropriate; 2 - Inappropriate; 3 - Appropriate; 4 - Highly Appropriate.) For items x - z you are asked to circle the appropriate code number. It is important to answer all questions.

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
In a child centered classroom the teacher would:				
(a) Organize learning experiences around the expressed interests of the children	1	2	3	4
(b) Provide time for free exploration with materials e.g., manipulative aids, paints, materials for science investigations	1	2	3	4
(c) Tell children when they are wrong and correct their errors	1	2	3	4
(d) Place a high priority on the behavior of children	1	2	3	4
(e) Make use of questioning techniques that promote creative and divergent thinking	1	2	3	4
(f) Have a high level of choice in the room	1	2	3	4

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
(g) Use positive guidance techniques, e.g., fostering children's autonomy, redirection, providing children with the reason for a specific role as the principle means of discipline	1	2	3	4
(h) Seek to understand children's reasoning behind incorrect responses e.g., asks children questions to determine why they made a particular response	1	2	3	4
(i) Limit interactions with parents to the formal reporting periods	1	2	3	4
(j) Provide regular opportunities for parents to participate in classroom activities e.g., reading a story to the children, tutoring, assisting with the making of learning games	1	2	3	4
(k) Hold the belief that interest provides the motivation for children's learning	1	2	3	4
(l) Make extensive use of stickers and other forms of external rewards to motivate children	1	2	3	4
(m) Expect children at center time to move from one center to another on a predetermined schedule	1	2	3	4
(n) Set up a broad range of activities for children to select from	1	2	3	4
(o) Employ instructional strategies adapted to the children's learning styles and developmental levels	1	2	3	4

	Highly Inappropriate	Inappropriate	Appropriate	Highly Appropriate
(p) Schedule large blocks of time so children can carry through with their ideas and projects	1	2	3	4
(q) Devise activities to promote the reasoning skills of children	1	2	3	4
(r) View children as lifelong learners	1	2	3	4
(s) Define student progress in terms of the criteria outlined in Department of Education curriculum documents	1	2	3	4
(t) Assign numerical and/or letter grades to children	1	2	3	4
(u) Focus on the "doing" of an art activity as opposed to how it turns out	1	2	3	4
(v) Define student progress in terms of individual growth and development	1	2	3	4
(w) Define student progress by comparison with other children	1	2	3	4
(x) Devise activities to promote the self concept of children.				
Frequently				1
Sometimes				2
Not at all				3
(y) Retain a child he/she considers to be lacking the skills necessary to cope with the materials at the next grade level.				
Frequently				1
Rarely				2
Never				3

(z) Report children's progress to parents.

In anecdotal format	1
In numerical/letter grade format	2
Combination of anecdotal and numerical	3

PART 6

On this section of the questionnaire you are invited to share your vision of what a child centered classroom would look like. Feel free to comment on the learning environment, instructional strategies, role of the teacher, the curriculum or other areas deemed important by you. If additional space is needed please use the back of the paper.

Learning environment:

Instructional strategies:

Role of the teacher:

Curriculum:

Other areas:

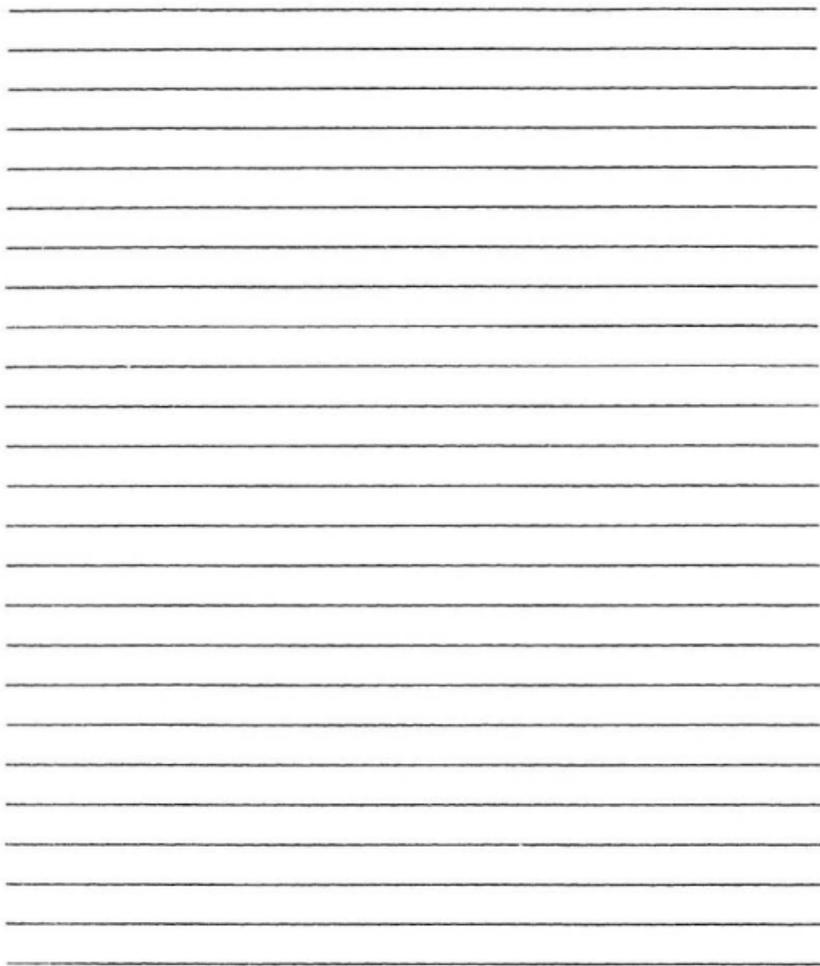
PART SEVEN

Children Learning, A Primary Curriculum Handbook, advocates child centered instruction. Please comment on the extent to which you believe such an approach has been adopted by teachers. What factors would you identify as vital to the successful implementation of this approach? What factors would you identify as detrimental to the implementation of this approach?

Extent of adoption:

Factors vital to successful implementation:

Factors impeding successful implementation:



APPENDIX B
Interview Schedule

INTERVIEW SCHEDULE

Provide individual being interviewed with background of study, why it is being conducted, the researcher's interest in concept of child centeredness, etc.

Warm-up Question

1. How long have you been teaching the present grade?

2. How many children do you currently have in your class?

3. I was really interested in the aspects of your own program that you considered child centered. Perhaps we can begin by having you talk about your own classroom and the aspects of it you feel to be illustrative of a child centered approach to education.

Interview Questions

1. A number of terms seem to recur in the literature on child centered instruction and in the responses to my thesis questionnaire - terms such as:
 "needs and interests of children"
 "active learning"
 "facilitative role of teacher".
 "concrete materials"
 Perhaps if I give you one term at a time you can tell me what it means to you.
2. (a) In the questionnaire you were asked to comment on the extent to which child centered instruction was adopted by teachers. You replied. . . . (tell response). . . . What is the basis for this opinion?

Probing questions:

- To what degree would you say that child centered instruction was implemented in other schools you may have worked in.
- In other classrooms you have visited.
- With other teachers you have known.

- (b) You identified several factors as vital to the successful implementation of child centered instruction. They were (name factors). Would you comment further on these factors.

Probing questions:

- Financial support was frequently mentioned in the questionnaire responses as being vital to the implementation of child centered instruction. Do you agree with this opinion? Why? Why not?
 - Small class size was another factor frequently identified as vital to the implementation of child centered instruction. Would you agree with this? Please elaborate.
 - A positive attitude on the part of teachers was identified as playing a vital role in the implementation of child centered instruction. Is your view similar to this? Please elaborate.
 - What other factors would you identify as important in the implementation of child centered instruction?
- (c) You identified several factors as impeding the implementation of child centered instruction. They included (name factors). . . . Perhaps you could elaborate further on why you consider them to be impeding factors.

Probing questions:

- A good number of teachers who responded to the questionnaire identified financial restraints as an impediment to child centered instruction. Would you agree with this? Please elaborate.
- Lack of preparation time for teachers was also identified as a factor negatively affecting implementation. Do you agree with this? Please elaborate with examples.
- A number of teacher attitudes were listed as negatively affecting the implementation of child centered instruction.

- Do you feel there are specific attitudes that adversely affect the implementation of child centered instruction? Which attitudes would you identify as having this effect? In which way would they adversely affect implementation of child centered instruction? Please elaborate by way of examples.

3. (a) Part 2 of the questionnaire focused on the curriculum goals of a child centered classroom. With respect to item (h) - helping children acquire the body of knowledge they will need for elementary school, you replied it was (note response). . . . Why do you think this goal is. . . . (note response). . . . to child centered curriculum.
- (b) You noted that developing a curriculum which has a major focus on academic growth was a (note response). . . . goal of child centered instruction. Why do you feel this is so?
- (c) You indicated in item (g) - learning of basic skills and concepts is. . . . (note response). . . ., to creating a child centered classroom. Why do you think this goal is. . . . (note response). . . .
- (d) You identified promoting a curriculum which is responsive to the development levels of individual children as. . . . (note response). . . . Please explain this response further.

Probing questions:

- 1) What basic skills and concepts do you feel children in a child centered classroom need to acquire?
4. Part 3 of the questionnaire relates to the learning environment in the classroom so I would like to discuss this aspect a little.
 - (a) What type of seating arrangements would you expect to see in a child centered classroom?

- (b) In section q you identified _____ (note response). . . . as a usual form of grouping in child centered classroom. Would you elaborate on this response, please? What type of activities do you see children engaged in with this grouping strategy?

Probing question:

- i) Do you see any other type of grouping being used in child centered classroom? If so, what?
5. In the section related to instructional strategies you replied that external rewards such as stickers and stars are. . . . (note response). . . . as motivational tools. Which do you see as most important, extrinsic or intrinsic rewards?
- Do you think rewards such as stickers and stars have a place in the child centered classroom? Why? Why not?
6. (a) With regard to teaching strategies how important do you think an interdisciplinary approach to instruction is? Please elaborate.
- (b) You indicated. . . . of time (note response) should be spent on subject teaching and of time (note response) on interdisciplinary teaching. Why did you choose that breakdown?
7. (a) You noted that the curriculum guides published by the Department of Education would be used. . . . (note time). . . . in a child centered classroom. Please elaborate on this response.

Probing Questions:

- What role do the provincial curriculum guides play in the implementation of child centered instruction?
- How important do you think these guides are in the implementation of child centered instruction? Please explain.
- What other resources might teachers in child centered classrooms use to develop the framework of their program?

- (b) You noted that the textbooks authorized by the Department of Education would be used. . . . (note time). . . . in a child centered classroom. Please elaborate on this response.

Probing Questions:

- Might other, if any, textbooks be used in a child centered classroom? If so, which ones would you suggest?
 - How important do you think textbooks are in a child centered classroom? Please explain.
 - What is the role of textbooks in a child centered classroom?
- (c) Describe the role of the teacher guide books, which accompany authorized programs, in the child centered classroom.
- (d) In planning curriculum experiences, what would child centered teachers use as their major resources? Please elaborate on your response.
8. Describe the typical day of a teacher in a child centered classroom.

Probing questions:

- Describe student/teacher interaction in a child centered classroom.
- Comment on student/student interactions.
- What kinds of questioning techniques are used by the teacher?
- With respect to item (d) "place a high priority on the behavior of children", your response was. . . . (note response). . . . What was the basis for this particular response?
- With regard to item (s) "define student progress in terms of the criteria outlined in Department of Education curriculum documents", your response was. . . . (note response). . . . Why did you respond in this manner? How else might teachers in a child centered classroom define student progress?

9. (a) What do you think about when the word "play" in relationship to classroom experiences is mentioned?
- (b) Do you feel play has an important role in the child centered classroom? Why? Why not?
- (c) What types of activities would you consider to be "play."
- Would you consider experimenting with science objects play?
 - Do you view working with concrete materials as play?
 - Do you view the exploring and manipulating of art materials as play?
 - Do you consider children to be engaged in play when they are working on activities of their own choice?

APPENDIX C
Correspondence

22 Kippens Road
Kippens, NF

April 4, 1991

Mr. Andrew Butt
Superintendent
Appalachia Roman Catholic School Board
P.O. Box 5200
Stephenville, NF
A2N 3M5

Dear Mr. Butt:

As per our recent conversation, I am writing to formally request permission to administer a questionnaire to the primary teachers (Grades 1-3) in the Appalachia Roman Catholic School Board. I would also like to administer a pilot copy of the questionnaire to the kindergarten teachers. This questionnaire is part of my thesis, tentatively titled, Characteristics of Child Centered Instruction: Towards An Operational Definition.

Should you request additional information, please feel free to contact me. Your cooperation is greatly appreciated.

Yours sincerely,

Marie Wiseman

Appalachia Roman Catholic School Board

*P.O. Box 5200, Stephenville, Newfoundland, A2N 3M5 : Tel. (709)643-9525 : Fax (709)643-9236*²⁶⁷

10 April 1991

Ms. Marie Wiseman
22 Kippens Road
Kippens, NF
A2N 1A7

Dear Marie:

Permission is granted for you to administer a questionnaire to primary teachers in the Appalachia R.C. School Board as part of your thesis.

Sincerely,

Andrew D. Butt
Superintendent

ADB/je

c.c. Primary School Principals

22 Kippens Road
Kippens, NF

April 4, 1991

Dear Principal:

I am presently completing the requirements for a masters degree in Curriculum and Instruction: (Early Childhood Education). As part of the requirements I am working on a thesis, tentatively titled, Characteristics of Child Centered Instruction: Towards An Operational Definition. A part of the thesis will be an examination of the specific features, primary teachers, deem to be illustrative of child centered instruction.

At this time, I am writing to request permission to administer a questionnaire to the primary teachers (Grades 1-3) within your school. I would also like to administer a sample copy of the questionnaire to the kindergarten teacher/teachers. I have already discussed this matter with Mr. Andrew Butt, Superintendent of the Appalachia Roman Catholic School Board, who has given his approval for the project.

Plans are to administer the questionnaire before the end of the present school year. If there are any concerns or questions please feel free to contact me.

Your cooperation, and that of your teachers, will be greatly valued.

Yours sincerely,

Marie Wiseman

22 Kippens Road
Kippens, NF
April 11, 1991
A2N 1A7

Dear Kindergarten Teachers:

Recently a copy of a letter requesting permission to administer a pilot copy of my thesis questionnaire was sent to all principals. At this time I am enclosing a copy of the questionnaire. Your cooperation in completing and returning this questionnaire as soon as possible will be greatly appreciated. Attached to the back of the questionnaire, you will find a blank page. Please use this page to note any observed ambiguousness with particular items, questionnaire format, clarity of directions and to make suggestions that would lead to an improvement of the questionnaire.

The questionnaire can be returned with the central office mail in its original envelope. Please be assured that your responses will be held in the strictest confidence.

Thank you for your valuable assistance.

Sincerely,

Marie Wiseman

22 Kippens Road
Kippens, NF

May 6, 1991

MEMO TO : Kindergarten Teachers

FROM : Marie Wiseman

I wish to thank you all sincerely for completing and returning my thesis questionnaire so promptly. Your assistance in completing my work is greatly appreciated.

Have a nice day!

22 Kippens Road
Kippens, NF
A2N 1A7

May 10, 1992

Dear Primary Teacher:

Recently a letter was sent to all principals advising of my plans to administer a questionnaire to the primary teachers with the Appalachia Roman Catholic School Board. Permission to administer this questionnaire was granted by both the principals and the Superintendent of Education.

At this time I am seeking your cooperation in completing the enclosed questionnaire. In my position as a primary coordinator, I have become extremely interested in the concept of child centeredness. It is this interest that has resulted in my undertaking a study focusing on defining child centered instruction. Obtaining the views primary teachers hold regarding this concept is an important step in this process.

If at all possible please complete the questionnaire by Mary 24th. The questionnaire can be returned with the central office mail in the enclosed self-addressed envelope. Please be assured that all responses will remain in strictest confidence.

Thank you for your assistance. The success of my work depends in large part on your cooperation.

Yours truly,

Marie Wiseman

May 30, 1991

MEMO TO : Primary Teachers
FROM : Marie

A sincere thanks is extended to all teachers who completed my thesis questionnaire. I recognize this is a busy time of year for primary teachers so the time you have given to assisting me with my work is greatly appreciated.

At this time I wish to remind teachers who have not yet completed the questionnaire that your cooperation is urgently requested. I have distributed about 60 questionnaires and a response to the majority of them is vital to the success of my work. If you have misplaced the original questionnaire, please contact me and I will gladly send along another.

Have a nice summer vacation.

Thank you again.

St. Stephen's Primary School

WEST STREET, P.O. BOX 5500
STEPHENVILLE, NEWFOUNDLAND
A2N 3P5
Telephone: (709) 643-2331 or (709) 643-3442

April 9, 1991

Marie Wiseman
22 Kippens Road
Kippens, NF

Dear Marie:

In response to your request to administer a questionnaire to the teachers of St. Stephen's Primary, I am happy to help you out by agreeing to administer this questionnaire.

Feel free to send along the questionnaire at your convenience.

I would also like to wish you the best of luck with your thesis.

Sincerely,

Ann Marie

St. Anne Elementary School

274

Flat Bay, St. George's
Newfoundland
A0N1Z0

April 12, 1991

Mrs. Marie Wiseman
Appalachia R. C. School Board
P. O. Box 5200
Stephenville, NF
A2N 3M5

Dear Marie,

I met with my staff on April 11, 1991 and discussed your request for our help in your future studies.

I am happy to inform you that we as a staff support your request and are happy to participate in your questionnaire.

We wish you every success in your studies and look forward to the fruits of your extended knowledge.

Sincerely Yours,

Sister Betty Morrissey
Principal

SBM/jm

file

APPENDIX D
Sample Theme

SPELLING

- booklets illustrating "moose words" collection
- word hunter puzzles
- word family activity
 - moose, loose, goose

MATHEMATICS

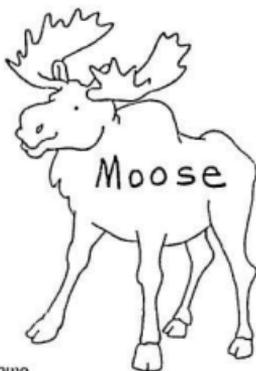
- writing story problems
- measuring "life-size" cut out moose
- graphing/number or children who saw a moose, did not see a moose and feelings about moose

RESEARCH

- fact books about moose
- life cycle of moose
- day in life of moose

ART

- painting moose
- modeling moose from playdough or clay
- moose diorama

**COOKING**

- moose burgers
- moose chili
- moose stew
- moosemeat soup
- moose sukiyaki

SPEAKING

- class visit by game warden
- interviews (a hunter children know)
- oral reports about moose

SOCIAL STUDIES

- mapping (cardinal directions)

LISTENING

- fantasy stories about moose written by classmates

READING

- books
- poetry
- retelling stories

WRITING

- group poems
- modeled writing
- cinquain poems
- two-word poems
- name poems
- riddles
- letters
- news article



