A STUDY OF EDUCATIONAL PROGRAMMES AT THE PRE-PRIMARY STAGE AND THEIR INFLUENCE ON COGNITIVE, SOCIAL AND EMOTIONAL DEVELOPMENT OF CHILDREN IN DIMAPUR, NAGALAND

By

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I, Temjennaro Jamir, hereby declare that the subject matter of the thesis titled "**A study of the educational programmes at the pre primary stage and their influence on cognitive, social and emotional development of children in Dimapur, Nagaland**" is the record of work done by me and that the contents of this thesis did not form the basis of the award of any previous degree to me or to the best of my knowledge to any body else, and that the thesis has not been submitted by me for any research degree in any other university/institute.

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CHAPTER I
INTRODUCTION

1.0 Context of the study:

Children constitute the most valuable human resource of any nation and, a nation's future lies in their proper development. The childhood period is apparently the most decisive period, where a man's character and affectivity in developing a child's full potential is outlined. The destiny of mankind is moulded at this age, and the impressions that are made on the child's mind, last throughout his life.

Acknowledgement of the importance of the early years, as exerting a profound influence on its future development, has been recognized all over the world. Arnold Gesell was among the first to recognize the importance of early childhood in human development, Gesell (1925, p4)

"We must grant, at the outset, that the preschool period exceeds approximately the first seventy months of the scriptural allotment of seventy years - only one clock hour, reckoning the entire span of human life as a day. But during that hour the major portion of the total stream of development flows under the bridge"

The foundations of habits, which shaped the adult character and personality, are formed during this period. Frued (1917) indicated that, the major traits of personality are established early in childhood, and that subsequent personality development was merely an extension of elaboration of these traits.

The early years in a child's life are crucial for their learning. They learn a great deal, and what they learn has great significance's in their later learning. Hunt (1964) and Deutsch (1964) indicate that early learning influences later learning, and that educational potential of the early years is too great to waste. Hebb's (1949) emphasis on "primary learning" based on early perceptual experiences and Harlow's (1950) Principles of

"learning to learn" both affirm the idea that early learning facilitates later learning and forms the foundation upon which the subsequent learning is based.

The early childhood years are the best period to mould children's lives, when they are without inhibition and external control. If the child is provided with an adequate environment and early-formalized experiences, his creativity level and problem solving capacity can be developed considerably. Bloom 1964, Hunt, 1961, also suggested that early intervention could make a critical difference. It is a period, for optimum development in various aspects viz.; intellectual, emotional, social and physical. Benjamin Bloom (1964) identified the early years as the period of most rapid growth in human characteristics and optimum period of development. During this period, any deprivation or stimulation is most active causing either obstruction or acceleration in the development process Dittman (1968) reveals, the importance of the early years and the necessity for education from the beginning; deprivation leaves lasting and costly effects,

Education of child begins at early stage. Home is viewed as the proper context of learning, the parents as proper teachers and the earliest stage of childhood as the period for beginning education. It is the family that provides the immediate pattern of physical, social and emotional support and stimulation. It has been rightly stated, " that as a rule the family is the setting for socializing the child. His entire early development is a result of his experiences within the family context, though it is subject to modifications as he grows older and interacts more and more with people outside the family. "The child's stimulating home environment and relationship with the parents help in moulding his attitude and behaviour. Early childhood education, therefore is a part of the child rearing

experiences provided naturally for all children. Mac Donald (1969) has correctly indicated early childhood education as a form of deliberate social intervention.

Many homes, however, are not always able to provide the best conditions and experience for the development of children. For such children, pre-primary education supplements the home, as it is an integration of education in and out of the school. Goldstein (1972) and Prossor (1973) have advocated that, pre school education is not so necessary for the middle and upper class children but it is a must for poor children and the underprivileged children who are mostly nurtured in 'restricted' environment.

During the twenties, research in child development stressed the importance of early years in later growth, influenced the thinking concerning the responsibility for care and education of the young child. In addition, subsequent, to the industrial revolution the effects of urbanization, modernization and other cultural changes, have almost universally been adverse to breaking down of extended family and the beginning of a trend with an increasing number of women joining the work force. Further, impetus to pre -school education was provided by the McMillian sisters who started nursery education for the slum children in England with a view to nurture the whole child socially, physically, emotionally and intellectually (McMillian, 1919). The Head Start programme launched by the US Federal Government as a part of "war on poverty", to Improved the child's health and in meeting their social, emotional and physical needs also helped to spread the pre- school education movement the world over (Spodek,Saracho and Davis, 1991)

The years, since the launch of the "Head Start" movement and other programmes for the poor children, have been marked by intense activity in early childhood education.

It has helped to pay more attention to the growing needs of children, to view pre- school education as an essential service in our society, and also to focus attention on the need to build a strong foundation during the formative years. The International Commission on Education (1972) emphasized that education of pre- school children is an essential pre-condition to any educational and cultural policy. In the regional meeting of experts (UNESCO, 1979), the need for early childhood education was advocated with the arguments on its promotional role for ensuring social justice and equality, biological, physical, emotional, social and intellectual growth of the child, and for the fulfillment of potential abilities of children.

Of late early childhood education has become increasingly important in India. Soon, after Independence Universalisation of education to all children until 14 years of age was advocated in the subsequent years, the idea contained in the Universal Declaration on Human Right that, "Everyone has a right to Education" (Francois, 1968) became a concern in India too. As education is the vital link in total development, educational development became a matter of concern. To make this educational imperative a reality, Early childhood education emerges as a priority area, in realizing the immediate goal of universalisation by facilitating enrol ments, retentions and encouraging the child for formal schooling.

The growing awareness of the significance of early childhood in the sphere of human development has gained momentum in India and the need to provide care and education for the young child is increasingly felt. Realizing this facts, a variety of institutions have been started by the private organizations and individuals on the lines of the philosophy and practices suggested by Montessori, Froebel, and the Mc Millian

sisters and these have became popular all over India. A new type of school, based on Indian culture and keeping in view the Indian requirements, and known as "basic school" was evolved in subsequent years. There are also Anganwadis /Balwadis started all over India to cater to the needs of children in rural and slum areas in the country.

Formal education in Nagaland started in the late 19th century with the coming of the American missionaries. Since, the formation of the state of Nagaland in 1963, the number of Schools in the state has shown tremendous increase (Sema, 1986). The constitutional obligation of providing free and compulsory education to all children in the age group of 6-14 years is the guiding spirit for providing necessary care and education. In the state, early childhood education is implemented through various agencies viz. the SCERT, Social security and welfare Department and the School education Department. Thus keeping in view the objectives and assumptions of early childhood education, the government of Nagaland signed an agreement with the UNICEF in 1985 to implement early childhood project. The early childhood project trains the pre- primary teachers and Anganwadi workers (Nagaland1994). The ICDS scheme, which is a centrally sponsored scheme, provides nutrition and health education, supplementary education, non- formal pre- school education and referral services (Nagaland, 1988).

In Nagaland, pre- primary education has been in operation for sometime, and though there has been a gradual increase in the number of schools, yet it cannot be said to cater to the needs and interests of all children. In the field of pre- primary education, till now in Nagaland, no evaluative research study has been done. Besides, there is a feeling that the education programmes offered in many existing pre-primary classes are not organized on scientific lines due to various reasons.

It is, therefore, thought fit to undertake research on the various aspects concerning pre- primary education.

1.1 STATEMENT OF THE PROBLEM:

" A study of the educational programmes at the pre- primary stage and their influence on cognitive, social and emotional development of children in Dimapur, Nagaland."

1.2 DEFINITIONS OF TERMS:

Pre-primary education- Education imparted to the infants before they enter into the primary school is generally known as pre- primary education. This will include institutions like nursery, Montessori classes and Anganwadis.

Development; In the present study, development will cover social, emotional and cognitive parameters of the child's growth and development.

Social development: " Social development" according to Ralph McCaw (1965), is the learning of behaviour required by the social expectation of the culture. It involves learning to get along with other people. It involves proper performance behavior playing of approved roles and the development of social attitudes" (p.13).

Emotional development: according to Webster's dictionary, emotions involve" strong feelings (as of love, hate, desire, or fear)... manifest in neuromuscular, respiratory, cardiovascular, hormonal, and other bodily changes". Emotional development is related to children's over all development.

Cognitive Development: According to Ralph McCaw (1965), cognitive development includes thinking, perceiving, remembering, forming concepts, generalizing

and abstracting, as well as general intellectual activity. According to Musser, Conger and Kagan (1966, p252) " Intellectual ability is most broadly defined as the ability to adopt to environment, and intellectual growth in characterized by (i) acquisition of language and number skills and the rules that govern the use of these symbols; (ii) Increased memory ability;(iii) Differentiation of perceptual experience, and (vi) learning the rules of logic and how to apply them to reason out problems".

1.3 SCOPE OF STUDY:

The present study intends to trace the historical development of pre- primary education in Nagaland. The study of early childhood education is a worthwhile endeavor for several reasons. It reveals how slowly, early childhood education came into its own as an organized effort in the interest of the young child. The history of early childhood education also provides an overview of the theoretical foundation from which early childhood philosophy is drawn. The theories of child development and behaviour emerged through history serve as the criteria upon which to base decisions about methods, materials and content. Finally, a study of early childhood reveals the origins of contemporary curriculum practiced and trends.

The idea of pre- school education through an organized institution outside the home of the child, has been stimulated as a result of various philosophical thoughts, the Industrial revolution, changing social needs, economic necessity, universalisation of elementary education, women's emancipation. Further, it has been stimulated by studies conducted by developmental neurologists, psychologists, and animal behaviorists on the importance of early years for all round development of the child.

In the present century, the importance of pre- school and early experiences in their later development has been acknowledged all over the world. Subsequently of late, it has revived interest in the state too. Pre- primary is the education that goes before the child's compulsory schooling. It is an informal education which, begins when the child is 2 or 3 years of age. Children on their early childhood years are served by many kinds of institution. Children are educated in private institutions, secular schools as well as schools run by churches. Churches operate pre-schools to further religious training or to satisfy community needs. Most programmes for children are in private institutions, and are operated either for profit or non-profit. These institutions serve fewer children than do the Government schools, and often enroll groups that are alike in economic status, ethnicity, or some group traits.

In the State, many terms have been used interchangeably to denote the pre-school education programmes. These include kindergarten, nursery education, Montessori education, and pre-primary education. But, they signify the common purpose as a preparation for primary schools, focussing mainly on the child and his or her educational or physical and psychological needs or the social or economic needs of the state. The programmes of education also vary in different types of pre-schools. A detailed study of these institutions and their programmes need to be undertaken to know the state of development of pre-primary education in the state in general and Dimapur in particular.

The plans and programmes of education provided in each of the pre-primary institutions will influence the development pattern of children. According to Schweinhart and Weikart (1980) could early childhood programme experiences enable children to

achieve greater success, develop higher motivation, better school performance and more successful school careers. Early childhood programmme quality is important for young children. Studies (Holloway and Reichhart Erickson, 1988; Pierson, Walker and Jivan, 1984; Roupp, Travers; Glantz, and Coelen, 1979; Whitebook, Howes and Phillips, 1989) reveal that high quality programmes make greater contribution to the behavior of the children. These schools are supposed to promote the physical, intellectual, social and emotional development of children through various programmes and activities. Venkataram (1984) reveals that, early childhood education serves to fulfill effectively all the needs of the young child physical, social, emotional and psychological. Studies conducted by Saxena 1971, Deenamal, 1978, indicate that early childhood education prepares a sound base for formal education. These beneficial effects are likely to be manifested in children as they proceed from month to month in such schools.

The present study would also attempt to study the pattern of development attained by the children in the cognitive, social and emotional sphere after completing at least a year in such schools. Cognitive development will studied in terms of competence and proficiency achieved in language skills, number sense and in the acquisition of general knowledge about environment and the like. Social development will be studied in terms of levels of cooperation, participation in-group activities, sensitivity to group norms, will to share one's time and energy with the group and the like. Emotional aspects will involve learning to control one's emotions, anger, fear, anxiety and also to express pleasant emotion or elation, affection and joy and the level of self confidence attained. These aspects are important in any study on the influence of pre-primary education on the development of children

Children are recognized as having intellectual, social and emotional needs. A well- rounded programme must be provided for the child's development in all these areas. Early childhood programmes and activities contribute in building the child's cognitive abilities to generalize and formulate ideas, to solve problems, increase the child's knowledge about the world, their ability to observe, to listen, to remember, to use language effectively and to reason. Children also, through many experiences pick up desirable social abilities to cooperate, to share and to take turns. Play serves as an important function in social development. The child becomes socially acceptable to other children of the same sex and shows lack of dependence on adults. The child also, forms positive self-concept of social skills, and readiness for formal learning. Emotions play a vital role during the child's life. Through everyday experiences, children adapt to the existence of emotions. It has a profound influence on their effectiveness and happiness as a person. It prepares the young child learn, to appreciate the pleasurable aspects of emotions, and to cope with unpleasantness in a constructive manner and also contributes to the feeling of security and adequacy among the children.

The pre-school activities are organized for the interest of these children, and its ultimate value is determined by the contribution it makes to an aspect of child development. Hence the proposed research would attempt to study the programmes of activities organized and the manner in which they benefit young children of pre-primary classes in Dimapur.

1.4 OBJECTIVES:

(1) To study, the pattern of development of pre-primary education in Dimapur, in a historical perspective.

(2) To study, the facilities and programme of educational experiences provided in the pre-primary schools functioning in Dimapur, Nagaland.

(3) To study, the influence of pre-primary education on the cognitive development of children in Dimapur, Nagaland.

(4) To study, the influence of pre-primary education on the social development of children in Dimapur, Nagaland.

(5) To study, the influence of pre-primary education on the emotional development of children in Dimapur, Nagaland.

1.5 DELIMITIONS OF THE STUDY:

(1) The present study will be confined to Dimapur town and the immediately adjoining rural areas and environs within, about 25 Kms.

(2) For the sake of the present study, the pre-primary schools, nursery Montessori, kindergarten classes and Anganwadis, which have been in existence for sometime and are registered bodies alone were considered. It did not include crèches and pre-primary schools recently started by private bodies, which have not yet been recognized and other coaching centers etc.

CHAPTER II
REVIEW OF RELATED LITERATURE

2.0 INTRODUCTION:

The present research was undertaken in the backdrop of a growing realization in the world today, that early years are most crucial and highly impressionable stage in an individual's life. It is during this stage of life that the foundation of man's physical, social, emotional and mental developments are laid. Pre-primary education schemes are supposed to provide such foundation to young children. In the State of Nagaland pre-school education was started late and till now, no evaluative study has been undertaken to assess its effectiveness. Therefore, it was thought fit and necessary to study the various educational programs at pre-school level and to assess the benefits, that children derive from such education.

2.1 IMPORTANCE OF EARLY CHILDHOOD EDUCATION:

Empirical studies have reported that, the first six years of life comprise the most critical period for satisfactory adult development, a view that has been further endorsed by recent researches on the brain and its development. It is therefore, logically deduced that any interventions introduced subsequent to the early years in the area of education are not likely to provide the expected benefits if the early childhood stage is left unattended or inadequately attended. The modern pre-schools are therefore concerned with social and emotional problems of children as well as with their academic skills (Tyack, 1967). They also, serve to fulfill all the needs of the young child - physical, social, emotional and psychological (Venkataram, 1984).

Pre-primary education plays a decisive role in laying down foundation for rudimentary skills and knowledge that prepare the child for the demands of primary schooling, to adjust better to school routine and to have the necessary readiness which

help them in learning the 3'Rs. Sargeant Committee Report (1944) emphasized the importance of pre-primary education and linked it with the child's educational performance in primary school. It also, viewed pre-primary education as a necessary adjunct to primary education and emphasized that pre-primary education should be free. Various researches conducted by NCERT and other institutions in the country have found a significant positive impact of early childhood education in realizing the immediate goal of universalization by facilitating higher enrolment, achievement and retention rates in primary classes (Kaul, 1997). Murlidharan (1972) in her analytical study has shown that pre-school education may check a great number of wastage cases in elementary education.

Pre-primary education also, emerges as a priority area, in combating and compensating for the deprived children, as well as providing additional enrichment experiences in the absence of the optimal environment in their homes. The Education Commission (1964-66) recommended that, pre-primary education is of great significance to the physical, emotional and intellectual development of children especially those with unsatisfactory home conditions. The Mysore Committee for Pre-primary Education, 1961, felt that wide spread provision of facilities for pre-primary education would tend to minimize the gaps between the children in villages and those in towns, and between the children in poor families and those born in rich families. The National policy on Education (NPE) 1986, has given a great deal of importance on early childhood education, which is envisaged as a holistic program focussing on the total development of the young children in the age - range of 0-6 years, with special emphasis on children belonging to under privileged groups and first generations learners. The NPE also,

stresses on experiences and activities for promotion of social, emotional, mental, physical and aesthetic development through play way approach (Kaul and Bhatnagar, 1992).

Early childhood education everywhere has been influenced by the concepts and theories developed by educational philosophers. These theories have provided the foundations for early childhood curriculum and classroom practices that are related to physical development, intellectual development, language development, and socio-emotional development. Friedrich Froebel, the father of Kindergarten, believed that education should serve the child physically, morally and intellectually and that it should be based on the child's previous experiences. Froebel's method of education was based upon the unfolding of children's inner mind through play (Frost and Kissinger, 1976). The Mc Millian Sister's, started the nursery school, initially to meet the needs of the slum children in London. It was meant to nurture the whole child socially, physically, emotionally and intellectually (Joe and Kissinger, 1976). Maria Montessori, started a system of education, in the interest of children at risk of school failure, developed a didactic, child-centered approach to their education (Montessori 1964).

The importance of parent's education is increasingly becoming significant for the optimum development of the child, since it is they who informally play a meaningful and decisive role in educating their children. Gandhiji had rightly remarked that, the first few years of the child's education should involve parent education as well as parent's participation in formal parent-teacher meetings, parent's group meetings, parent's conference, informal chats, home visits, news letter etc., to give them an opportunity to learn about their children's academic progress and adjustment in the schools. In addition, they acquire both skills and knowledge, that prepare them to participate more effectively

in the all round development of the child, to develop warm parent-child relationship, and to exert influence on early development. Heinz (1979) suggest that, three things occur when school and parents cooperate: 1) Parent's and children's self-concept increases, 2) children's motivation accelerates, and 3) children's achievement advances.

2.2 EARLY CHILDHOOD EDUCATION PRACTICES:

In our country, early childhood education has not been part of compulsory education and it is left primarily to private and voluntary agencies to run pre-school classes. However in the last few years, the early childhood education has assured a place of importance as is evident from an unprecedented expansion of such education both in the private and government sectors. To meet the needs of the growing child, education is provided by different agencies. The existing early childhood care and education programs include.

i) Integrated Child Development services (ICDS).

ii) Balwadis and day-care centres run by voluntary agencies with government assistance, to serve the urban and rural child.

iii) Pre-primary schools run by the State governments, municipal corporations and other governmental and non-governmental agencies.

In addition to this, since 1969, mobile creche units are functioning to serve the migrant children of slum-dwellers and construction workers in cities (Kochuthresia, 1985. P.6).

In the private sector, nursery and Kindergarten schools have grown at a phenomenal pace in urban areas and are gradually becoming more and more visible in the rural areas as well. Most of these schools are run by institutions like churches, labor

unions, industries and business organizations, as a part of their educational programs, with less assistance from the government. They mainly emphasize on the development of learning skills and other basic skills. In a number of schools, early childhood education is imparted in Pre-primary classes attached to primary schools, or run as an independent pre-schools, or often as a downward extension of formal school programs. The standard and emphasis vary widely from school to school. However, there are some well-run private nursery schools managed by enlightened educators or attached to colleges of education or home science, where the objective and curriculum are geared to the needs and development of the child. These institutions are operated either for profit or non-profit and they serve few children, giving due emphasis to individual difference, and making their experiences attractive and joyful to the children (Sharma, 1994).

However, such schools form a very small majority and are usually limited to the larger cities and towns, where their maintenance is expensive. Such schools are beyond the access of the majority of the under privileged group in the rural areas. Realizing the dire need of the rural scene and known as Balwadis/Anganwadis have been setup (Kochuthresia, 1985). These centres organized non-formal pre-school education for the children between the ages of 3 to 6 years, and are located in the premises of a primary school or in its immediate neighborhood. Its focus is in providing an integrated package of services like supplementary nutrition, immunization, health-check up, referral services, non-formal pre-school education and extension of nutrition/health education to women (Mohanty and Mohanty, 1994).

The largest programs of early childhood care and education is the ICDS, and it has emerged as a single major integrated social development program of the eighties. It

was launched in India in 1975, as a comprehensive scheme, aimed to uplift and improve the quality of life of poor children. Pre school education taken in a non-formal way is an important component of the ICDS program. The Anganwadis thus become the first stage in the process of the education for young children by initiating activities meant for the all round development of children. They also help children for better adjustment during formal schooling (Mohanty and Mohanty, 1994). A number of studies investigating on the impact of ICDS indicated that its intervention has a positive effect on language development and cognitive abilities. (Tarapore, Deshpande, and Pendse, 1986) found that, the quality of each Anganwadi also seems to make a difference.

Formal education had a very late start in Nagaland. Real formal education did not occur until the American missionaries came to Nagaland in 1872. With the formation of the state in 1963, the state has made notable stride in the field of education, the number of school and colleges have grown at a faster rate (Sema, 1986). In view of increasing population, expansion of habitation and the objective of attaining universalization of elementary education has been provided by thee government, voluntary agencies and the individuals.

In the recent years, the private bodies open more and more pre-primary schools. They also run classes attached to primary schools; very few schools are rum as independent pre-schools. Most of these private institution charge exorbitant fees and offer instruction in English. They use different terminology for pre-primary classes such as necessary classes, kindergarten, Montessori classes, etc. The curriculum for the pre-primary are prescribed by the Nagaland Board of School Education, but there is no curriculum among the voluntary and the individual institutions, and they follow a

program of activities according to the needs and circumstances. There are two types of pre-primary schools in the state: -

(i) Pre-primary schools under the ICDS, to serve the urban and the rural children.

(ii) Pre-primary schools under the State Department of School Education, local authorities, voluntary agencies and individuals.

In spite of the tremendous growth of education at the higher levels, the pre-primary education is still in its infancy in the State. The state Government has taken important measures to consolidate the imbalances by setting up Bal Bhavans in district headquarters' high schools. A corpus fund called Children's Education Assistance Fund has been set up to help needy children as envisaged in the National Policy of Education, 1986. The government has issued orders to set up Village Education Committees in all the villages to involve the local community in the management of educational institutions at the primary level. (Nagaland, 25 years of growth and development, 1988).

The Department of Social Security and Welfare also implements various welfare schemes for the upliftment of the children. The department implements various schemes-child welfare program, under which ICDS and Special Nutrition Schemes functions. Recreational Centres, Children's Park, Children's Ward and Children's Library-cum-museum at Kohima are provided under the Child Welfare Program (Nagaland, 1988). The SCERT organizes various programs with teaching methodology based on child centered education for teachers (Nagaland, 1994). Since 1986, the State has undertaken UNICEF assisted project entitled early childhood education for training pre-primary teachers and Anganwadi workers for child development. The District Institute of Education and Training (DIET) Kohima conducts one-year diploma course for

elementary teachers from various districts of the state. A centrally sponsored program, Special Orientation for primary schools Teachers (SOPT) trains the teachers and aimed at both awareness and enrichment aspects (Nagaland, 1996).

2.3 INFLUENCE OF EARLY CHILDHOOD PROGRAMMES ON CHILD DEVELOPMENT:

All early childhood education programs provide similar educational experiences for young children, even though there are differences among programs. Programs vary in purpose, philosophy, size, sponsorships and standard, but they all exist to meet the needs of children and their families. Within this diversity however, there are certain elements such as adult/child ratio, group size and staff qualification that seems to be universal condition for a high-quality program.

Evidences from various studies proved that, quality of early childhood program provided to the child have a sustainable impact on a long-term basis in terms of retention and achievement.

Frank (1938) indicated that, an effective program of early childhood education based upon the needs of the child would inevitably change our society far more effectively than any legislation or other social action. Gordon and Wilkerson (1966) indicated that, implementing a broad program covering the total environment would help the young children benefit from later education. Swift (1964), stress that, the quality of the program is dependent upon the quality of the personnel caring for the children and upon the resources available to them. Mitchell's (1989) survey highlights accumulating evidences those high-quality early childhood programs have a long-term positive effects for disadvantaged children. Katz (1987) also, recommends that, effective program

enables children to develop a disposition for curiosity for friendliness, for problem solving, for an interest in reading and numbers, and for seeing school as a positive support place.

Evidence from a number of works on early childhood development, proved that that there are no two opinions about the fact that first three years of a child's life are crucial for his cognitive, social and emotional development. Jean Piaget, undoubtedly, the foremost contributor to the study of cognitive, or intellectual development in the young child, emphasizes that intellectual development is an active process, especially in the early years. Piaget (1959), on the basis of his longitudinal study concluded that, development occurs in a sequential manner and sufficient experiences should be provided in the early years of life for reaching the most mature stage of abstractions and logical thinking. Piaget emphasized active early childhood education in developing intellectual development through encouraging activity, enriching environments and informal talks. He stated that, play is also important for intellectual experience and also for child's emotional development (Frost and Kissinger, 1976).

Erikson (1940) also, recognizes that formative years, provide the foundation for all the later motivations and personal disposition. The physical, social and ideational influences shape the individual personality development. Erikson assumes that, emotional aspects of life permeate all human functions. The nature of emotional content, or the quality of interpersonal relationship, determines the basic core of man's make-up. Erikson's works suggests, and even more active role for early childhood education. He also, emphasized play activity particularly important for the child's development (Spodek, Saracho and Davis, 1991).

Bloom's (1964), widely acclaimed influential study, "Stability and change in Human characteristics", showed that, environment tends to have its greatest effects in the periods of most rapid normal development; that is during infancy and early childhood. Bloom stressed the effects of environment on intelligence "Abundant" or "deprived" environments, he believes, can make about a 20-point difference in I. Q. His analysis concluded that, the rate of intellectual development is at the point of highest acceleration during the child's early years. He also concluded that, major development of personality takes place during the early years. It is evident, by about age five, as much as one-half of the variance at adolescence on intellectual interest, dependency, and aggression is predictable. Bloom proposed that environmental stability and change be linked to developmental stability and change. When the environment is relatively stable over a long period, a particular human characteristic will tend to be more stable than when the environment is changing. Thus, optimal environments are necessary for the individuals to achieve their full hereditary potential.

Pre-school intervention influences the foundation of all subsequent growth. Waston (1957) and Winter Bottom (1958) stressed the importance of experience in infancy for child's later development, and also emphasized early education outside the close ties between mother and infant. A well round pre-school program benefits the child's intellectual, social and emotional needs.

2.3.01 INFLUENCE OF PRE–PRIMARY EDUCATION ON COGNITIVE DEVELOPMENT:

Learning experiences in childhood play an important role in determining and affecting an individual's subsequent intelligence. Waston (1924) claims that, he could

produce an adult befitting any walk of life if only given the opportunity to manipulate the child's learning experiences from birth. Studies conducted by Hunt (1961) and White (1971) indicate that early learning is a positive influence on the development of intelligence.

Studies conducted by Wellman (1932); Skeels, Updegraff, Wellman and Williams, (1938), reveals that nursery school produces a gain in I.Q. The studies of Karnes, Teska, and Hodigins (1969), report gain in mean I.Q resulting from a year of pre-schooling for four-year-olds. Woolly (1925); Strak Weather, and Robert (1940) also reported improvement of I.Q as a function of attending nursery school.

Beller, (1969a, 1972), studied three groups of children who entered school at different ages, one group attended an experimental nursery program; another entered Kindergarten with any previous educational experiences; and the third one, entered first grade without having previously participated in an educational program. It was found that children who entered school later perform much poorly on intelligence test than children who started school earlier. It was also found that, there was a pronounced impact on social and emotional functioning.

Kohlberg's (1968b) evaluation on the impact of a Montessori classroom and two non-Montessori classrooms on cognitive functioning in pre-school children found that, Montessori program affect the performance on I.Q tests.

Evidences gathered by Robinson and Robinson (1971) from their study showed differences in measure of I.Q scores between the children who had been in the day care centre and those who had not. Caldwell (1971) examined the intellectual status of the

children in the Syracuse centre and found that centre infants showed an increase I.Q, where as the matched controls showed a decrease.

The study of Roy and Tiwari (1977) on the adjustment pattern of first grade children with and without Kindergarten experiences, showed that students who have not attended the Kindergarten or nursery school pose problems pertaining to adjustment as well as academic and intellectual development.

Palmer (1968, 1969, 1972) studies on child centred programs indicate that, intellectual training early in life has demonstrable effects on children both at the end of the eight month experimental program and also one year after the program ended.

Studies conducted by Rayo (1978), Saraswati (1974) Prakash (1982), Bahal and Saxena (1978), Mohanti and Mohanti (1985), Rath and Patnaik (1979), Sahu and Devi (1982) have also strongly indicated that various stimulation programs at the early childhood stage have positive effects on cognitive development of the child.

However, Olson and Hughes (1940), Goodenough and Maurer, (1940) were of the opinion that it was not necessarily the attendance at Nursery school that increases the I.Q scores. But, actually, an increase in I.Q scores may be from an exposure to a variety of non-intellective factors, such as increased familiarity with the materials and tasks contained in intelligence tests and greater adult-child rapport. Jenks and associates (1972) also, argue that, the effect of schooling appear to have little effect on intellectual development on the I.Q gains resulting from pre-school experiences are temporary.

Researches suggested that, early environmental experiences indeed have an important and profound effect on child's intellectual development. Bloom (1964) points out that, the effects of environment are likely to be greatest during the early and more

rapid period of intellectual development. Hunt (1961), Bloom (1964), Hess and Shipman (1965) all supported the importance of environmental factors in the development of education of young children. Schiff *et.al* (1982) were of the opinion that, changes in environment can go a long way towards boosting the I.Q scores and performance in the classroom.

A number of studies also, suggest that, enriched nursery school environment may have a salutary effect on children from deprived or impoverished background. Rameys (1985) opines that, provision of enriched education to child at an early age is a worth-while endeavour. Studies conducted by Lazar; Darlington; Murray; Royce and Snipper, (1982), Ramey, Bryant, and Suarz, (1985) found that, the detrimental effects of poverty on pre-school intellectual development are believed to be lessened when children attend quality day care centres. Evidence reviewed from Jones, (1954) and Kenedy et.al. (1963), indicate that, prolonged living under conditions of poverty results in steady lowering of I .Q scores. Schweinhart and Koshel, (1986), found that, children born into impoverished families are significantly more likely to exhibit intellectual under achievement than are their middle class peers.

Karnes; Teska, and Hodgins (1969), in a longitudinal study of disadvantaged children who participated in three different pre-school programs, report gain in mean I.Q resulting from a year of preschooling for four year old. Gray and Klaus (1970) in their study on a major longitudinal, as well as experimental intervention that, pursued the effects of early organized education to the end of the fourth grade for disadvantaged children in Nashville, Tennessee, found that among the four groups, the groups who

received pre-school education were significantly superior in cognitive development, to the two control groups.

Mishra (1982) reviews the evidences related to the effects of deprivation on cognitive competence and his findings suggested that, prolonged experimental deprivation adversely affect cognitive performance.

Studies on intervention programs, indicates that early environmental manipulation could have a maximum impact in modifying development and educability. Herber *et.al.* (1972) considered intervention during the infancy to be essential and the most visible impact of the program is clearly indicated on the children's intellectual performance. Hunt, (1969) has recommended that in order to prevent later intellectual deficits in lower-class children, intervention should begin in infancy, Schaefer (1970) emphasized that preventive programs that begin in infancy may be more effective.

The consortium on Longitudinal Studies Report, persistence of pre-school effect (Lazar *et.al.* 1977) demonstrates that, early intervention programs can provide significant long term educational benefits. Early childhood programs have produced significant increase in I.Q and achievement in early primary grades.

Head Start Synthesis Project (Mekey, et.al. 1985) reviewed fifty studies and evidence of an improvement in children's average intellectual performance that lasted several years. Woff and Stein (1966), investigated a number of Head Start programs, and found that students who had attended Head Start Programs usually performed better than control groups.

Gray and Klaus (1965, 1966) in a research study on early training project, indicated dramatic potential benefits of a sustained intervention program for pre-school

children of impoverished background. Gray and Klaus (1968) also reported that, there was a gain in I.Q of such children.

Perry Pre-school Project 1962, (Berrueta – Clement *et al.* 1984) experiments projects, findings showed that, children who participated in pre-school obtained significantly higher scores on measures of cognitive ability than control group children. They also obtained significantly higher scores on achievement tests in elementary schools.

Sahni, and Agarwal (1986), found that there was a significant difference in the cognitive abilities before and after intervention. However, a few other studies on intervention, indicate that there was no evidence of early intervention being more effective than later intervention (Caldwell, 1970; Gordon, 1973, Palmer, 1972). Studies reported by Skeels (1966), Dennis (1973) and Kagan and Klein (1973) indicated that even gross, environmentally produced intellectual retardation is not necessarily irreversible. In these studies, children show significant intellectual retardation and apathy during infancy while they were in a very restricted, unstimulating environment. However, when they were shifted to a more stimulating environment later, they seemed to catch up intellectually and appeared to function normally in other respects. Siptz (1986) reviewed a number of intervention programs and concluded that, in most of the programs, I.Q increases were transitory and difficult to maintain.

Research studies indicate that, effective caregivers, whether parents or teachers, were successful in integrating a variety of strategies to develop children's intellectual competence. A study by Carew (1980), on effective caregivers found that, the quality of

interactions and the learning experiences were a central factor in the cognitive development of children.

Studies conducted by Levenstein (1970) Streissguth and Bee (1972), suggested that, quality interventions of caregivers and children can enhance the learning and intellectual development of young children. Longitudinal studies have also, demonstrated the predictive value of early mothercare interaction for children's later cognitive and academic development (Estrada, Arsenio. Hess and Hollonway, 1987).

Swift (1964) studied the effects on children's experiences in nursery schools and day nurseries, indicated that the most important factor determining the nature of nursery school experiences for the child is the teacher.

McCale, Appelbaum, and Hogarty (1973) have concluded that personal behaviour is related to I.Q in later childhood. Clarke-Stewart (1973) also found that maternal attention was correlated with changes in children's developmental quotient.

Tiedeman (1992), in a study on pre-schooler's maternal support and cognitive competencies as predictors of elementary achievement, showed that the role of maternal support and associated pre-numerical and meta-linguistic competencies had a significant direct impact on cognitive pre-school competencies and academic achievement.

Studies also revealed that, warm homes stimulating the child's sense and intellectual produce youngsters who are competent mentally and oriented towards mastering whereas, deprivation results in sensory deprivation and intellectual and motor retardation (Olson, 1984; Siegel, 1984, Sroufe, 1985; Yarrow et.al., 1984, Bradley and Caldwell, 1976; Elardo; Bradley, and Caldwell 1975) have shown that , systematic measure of home stimulation are related to children's I.Q. score at age 3.

Pre-school period is the most important period for the development of language and it is the responsibility of early childhood programs to assist children in extending and enriching their verbal abilities.

Rao (1980), examined the effects of pre-school education on primary and secondary education, found that vocabulary score of pre-school going children was superior than the children without such education.

Bevli, (1974), found that the development of language is very important in the preschool, as it was at this stage that the child, was able to speak for the first time freely.

Bernstein (1960), Cazden (1966) have said, that the disadvantage is marked in language development. Suriakanthi (1982), found that socially disadvantaged children were deficient in their language development when compared with the socially advantaged children. The sex of the child influences language development among socially disadvantaged children. The study also, indicated that educational level of parents affect language development of both disadvantage and advantage children. Tough's (1977), studies the use of language by children from unfavoured home backgrounds who received nursery education with those from a similar home background who did not attend such school. She found that even at the age of three there were difference in both the linguistic structure and the language functions of middle and working class children. The working class children often used less language to report on past experiences or to predict the future, to give explanation, justify behaviour, and reflect on feelings.

Agnihotri (1979), in his study on language development among infants in relation to their social strata, found that there was a significant difference in the language of

infants hailing from various social classes. Bevli (1974) found that on the whole urban children were faster and earlier in language development than rural and industrial area children.

Pathak's (1975) study showed that, parental education had a positive correlation with language development and children from urban background were reported to have better language skills as compared to their rural counterparts.

Various studies have revealed that early speech of young child finds positive co-relation with intelligence. Better language development will also contribute towards better school performance as a whole. Muralidharan and Banerji (1974), in their studies showed that children who had pre-schooling has done consistently better in all aspects of language development than the children in primary school (i.e. local free primary school). They also found that, the former group has a much higher score in intellectual development than the latter group.

Muralidharan and Kaur (1987), in their study found that, no matter how disadvantaged the children were, well planned early childhood education strategies did make an impact and faster development of children. It was also found that in all cognitive tasks the experimental group of slum children scored consistently and significantly higher than the control group.

Hill and Giammates, (1963) reported results that children from middle families were ahead in vocabulary, reading -comprehension, arithmetic skills and ahead in problem solving. The studies of Kennedy Van de Reit and White (1963), Lesser *et.al.*, (1965) indicated that, on every sub-scale of Differential Aptitude Test (DAT) the middle

class children were higher, namely on verbal, reasoning, numerical reasoning and spatial abilities than their lower-class counterparts.

Robinson and Robinson (1971), in their study indicated that, enriched group care of the young infants, when carefully designed and fully staffed, may enhance cognitive development, especially during the time when verbal abilities are beginning to emerge.

2.3.02 INFLUENCE OF PRE – PRIMARY EDUCATION ON EMOTIONAL AND SOCIAL DEVELOPMENT:

Emotional development provides the base for social development. A child's socio-emotional development influences the child's social adjustment and emotional status, and the pleasant experiences during the childhood play a vital part in the child's overall performance and achievement.

Lewis and Michaelsonn (1983), opined that, emotional development depends on an understanding of the child's behaviour, the circumstances in which the behaviour takes place, and the attribution that the caregiver and the society provide to that coherence of behaviour and circumstances.

Malatesta, Culver, Tesman and Shepard (1989) contend the infants link their expressions with their experiences in social learning. Cohen and Wills, (1985) are of the opinion that, early establishment of a good social support net work is critical in children's development because it promotes their emotional adjustment, life satisfaction, and mental and physical health. Cole (1985) showed that, during the pre-school years control of facial expression occurs.

Clarke-Stewart and Fein (1983) found that, children receiving day care or attending nursery schools compared to children being raised exclusively at home, were

more co-operative and more assertive with peers, more cooperative and also competent with adults. Field (1991), in her study on the quality infant Day-care and grade school behaviour and performance found that, children with more time in quality infant day-care showed more social interaction in the form of friends and popularity, greater assertiveness and greater emotional well being.

Perry Pre-school project (1962), (Berrueta – Clement et al.1984) findings indicate that, children who participate in preschool received better ratings by elementary school teachers in academic, emotional and social development than control group children.

Research studies indicate that interaction of the child with parents, peers, environmental factors and other agents play a significant role in emotional development.

Long term studies of children showed that poor peer relationship in childhood is an indicator of future emotional problems, children rejected by their peers have a higher delinquency rate. (Roff and Sells, 1968).

Turner (1991) in a study investigating concurrent links between attachments and peer interactions showed that, insecure boys showed more aggressive, disruptive, assertive, controlling, and attention - seeking behaviour than secure children. Insecure girls also showed more dependent behaviour than secure children but, were less assertive in controlling behaviour, and more positive in expressive behaviour and compliance.

Akolkar (1960) points out, that home is the first and more vital agency, where the child's habit of thought, emotions and actions are formed.

Secure children are seen as having a history of an attachment relationship in which emotional needs are sensitively met. Secure relationship with parents may promote

growth of self-esteem because the children seen him or her as worthy of love (Bowlby, 1988).

Hetherington *et al.*, (1979c) also revealed that, secure attachment tends to assist in establishing relationship free of strains and division in marriages, freedom from a life of being hurt, and helpful in behaving in a mature manner.

Denenberg (1964) suggests that, any stimulation between birth and weaning reduces "emotional reactivity". The greater the infantile stimulation, the less emotionally in adulthood.

Bowlby (1951), in his attempt to document the effects of maternal deprivation found that, children in institutionalized centres showed not only emotional problems, but also serious intellectual impairment, deprivation of both sensory and social stimulation, and difficulty in relating to people. They also obtained low I Q scores, and did poorly in school during childhood and adolescence.

Evans, (1975) found that, there is a positive effect of public nursery school experiences upon the conceptual and affective development of both economically advantaged and disadvantaged children.

Pre school activities and experiences extends the child's social net work and helps the child to develop social skills, attitudes and socially desirable behaviour. Research studies found that, the social situations have a determining influence on the personality and social behaviour of pre-school children, and, the most beneficial effects of nursery school experiences for children are obvious in the area of social development.

Jersild and Fite, (1939); Hattwick, (1936); Brown and Hunt, (1961), assessed preschool experiences' influence on social development. Angell, (1958) opines that,

attending a preschool of high quality may be reflected in better personal and social adjustment over a period of 5 or 6 years. His study also, established the advantages from nursery school attendance for primary school adjustment.

Walsh (1931) observed that, nursery school children become more confident, more spontaneous, less inhibited, more independent, more self-reliant, and more interested in their environments than comparable preschoolers who did not attend nursery schools. Studies by Hattwick (1936); Van Abtyne and Hattwick (1939) noted similar difference. Later Bonney and Nicholson, (1958) saw more indicators that, elementary school children who had previous exposure to nursery school were more popular with their peers.

Hattwick (1936) stated that, those who experienced nursery for sometime showed distinct improvement in their attitude towards strangers, their play with other children and their independence of adults.

Harrold and Temple (1959-60) in their extensive study found that, children coming from nursery schools were better both at the beginning of term and at the end of it in adjusting to new circumstances of the infant school. They showed less overt signs of distress at the start of term and were also happier in the school environment. They were more confident towards adult strangers in each case and they appeared to have a slightly better vocabulary. They were also, more capable of looking after themselves and were generally more independent.

O'Sullivan (1957-8) found that, there are certain social differences between children who have attended nursery schools and those who have remained at home. Children who had attended nursery schools were more independent they can dress

themselves and change their own shoes. They were more self-assured. They also have been used to a school routine and seem ready to enjoy new things.

Jack (1934) found the emergence of hierarchy and dominate-submissive behaviour among the preschool children. It was also, found that, the submissive children significantly increased their dominance scores when they are given training in the use of the play material.

Rao (1980), study found that, children who have the benefits of preschool education were superior to those who do not receive any in personal and social characteristics.

Dowley (1969) indicates that, daycare centre programs generally attempt to develop physical and mental competence as well as confidence, courage, creativity, self-knowledge, sensitivity responsiveness, self-expression and social concern. Phillips *et.al* (1987) also noticed that, children who experienced more high quality daycare were more social.

Studies conducted by Anderson, 1989; Gunnvarson, 1978; Mc Crae and Herbert Jackson, 1975, showed that, infants who had attended infant daycare were more sociable with their peers.

In contrast, some investigators have reported that preschool children who attended infant day-care were more aggressive with peers and with adults (Barton and Schwartz, 1981; Belsky, 1988; Farber and Egeland, 1982; Haskins, 1985; Rubenstein; Howes, and Boyle 1981; Schwarz, Krolick, and Strickland, 1973). A study by Howes (1990) reported that, there was no difference between early and later entry except that early starter in low-

quality daycare showed less sociable behaviour. It also suggested that, early care children are not disadvantaged if they experienced high quality care.

It was found from research studies that, children from poverty environments are less likely to have a good opinion of themselves and in their skills. Whiteman and Deutsch (1968), evidence from their study indicates, children from poorer environments, have lower self-esteem, and children with low self-esteem do less well in school. Rosen (1956) found lower-class children to be lower in achievement motivation.

Battle and Rotter, (1963) in their study on personality or social differences between poor and middle children, they found that poor children are more likely to see responsibility for their actions as lying outside themselves, rather seeing themselves, as responsible for their own behaviour.

Murlidharan's (1968) study show that the difference in preschool social development between urban and rural and industrial children were only to be expected as cultural influences exercised their maximum effect perhaps on this aspect of development.

White and Watts (1973) in a longitudinal study of environmental determinants to human competency upon entering school pinpointed early years as most crucial in determining a child's later competency especially in the areas of social skills and attitudes.

Empirical studies concluded that, relationship with others during childhood period has a lasting effect on the child's personality behaviour and outlook in later life. In the early years, peer group serves as 'a Social Mirror'. It gives an opportunity for building an adequate motion of one self. The importance of peer relationships for children's

development has been recognized by Erickson, (1950); Piaget, (1959); Sullivan, 1953, Hartup, 1976, indicates that, opportunity for social play with peers as an essential contributor to healthy development. Sullivan (1953) indicates that, peer interactions probably teach more stable social lessons.

Narula (1982) from her research study investigating play preferences of nursery school children to their pattern of social behaviour, that significant differences were not noted in obstacle dominance, ego defence, need persistent intropunitiveness and impunitiveness, between groups of boys and between groups of girls at the two stages.

2.3.03 HOME CARE AND CHILD DEVELOPMENT:

Several research studies have given evidence of the relationship between early care-giving experiences and competences in later childhood. Family is the seedbed of personality and the mother is the chief gardener (Whiting and Child, 1953). It is the mother-child rearing practices, which determine the nature of a child's development. "Mothers have as powerful an influence over the welfare of future generations as all other earthly causes combined" on the education of children, 1814.

Erickson, 1950, opines that, the requirement for a development of a healthy personality for a child is to develop a sense of basic trust in his relationship with his parents.

Studies show that, the nature of bringing up the child during his early years makes him a secure or insecure adult. Sears, Maccoby and Levin; 1957, in their research study maintained that, warmth is the most crucial and pervasive factor affecting the child.

The development of attachment to their primary caregivers in infancy is important for children to establish strong relationship with others in their widening worlds (Bretherton and Waters, 1985; Cauce, 1986).

Bowlby (1969, 1973) in his theory of attachment has indicated, early bonding to mother is seen as the essential precursor of later social relationship.

Harlow and Harlow (1962) suggest that, the initial reciprocal attachment between mother and infant lay the groundwork for later social development both in subhuman and to a large extent in humans.

Spitz (1946b) showed that, children subjected to maternal deprivation a little later in life also displayed developmental abnormalities.

Results of studies on maternal employment suggest that, it does not always have detrimental effects on children; in fact in many studies positive consequences have been found. The employment of the mother does not seem to hinder the child's school achievement, if the family is stable, it may even enhance it (Clarke, 1977).

A study by Woods (1972) showed that, mothers who had favourable attitudes towards their work scored high in measure of personal and social adjustment. Occasional separation between mother and child are not necessarily harmful, and that, under certain conditions, they may be beneficial (Moore, 1964, quoted by Krech, Crutchfield, Livson and Krech, 1976, P 348).

Studies in Czechoslovakia showed that, children staying at home with frustrated mothers tend to have a more disturbed relationship with their parents than children who spent long days in nursery schools while their mothers work (Hann, 1976).

After reviewing studies done so far, Etaugh (1980) concluded that, the available evidence does not warrant the sweeping conclusion that, the non-maternal care is not harmful to young children. The evidence does permit the more cautious conclusion that, high quality non-maternal care has not been found to have negative effects on the development of preschool children.

Studies in America (Hattwick, 1936; Jersild and Fite, 1939; Walsh, 1931) all seemed to indicate that, children coming from nursery schools had an initial advantage over those children coming into infant schools straight from their own home.

Isaacs (1948) in her book 'Children and After', she included a chapter on 'The educational value of the Nursery School'. She claimed that, so far all studies have shown more or less accurately the degree or direction of difference, which the nursery school will make to the development of the child. Children in the nursery school learn more easily, play more actively and thrive better in every way than similar children who have not this advantage, even if they live in good homes.

Lazar *et al.* (1982) found with remarkable consistency that children who experienced a preschool program were less likely to be referred to special classes, or be required to repeat a grade. They were more achievement oriented; their parents had higher educational and occupational aspirations than control children, and they more often completed high school and are more likely to find employment.

A study conducted by Lal (1986) concluded that, those who had exposure to early childhood education adjusted better and picked up faster in the first two years of schooling.

The high/scope report, changed Lives (Berrueta - Clement, Schweinhart, Barnett, Esptein, and Weikart, 1984) demonstrated the long-term effects of early childhood education. The authors suggest that, in terms of both social and economic costs early childhood education more than pays for itself in relation to money that need not be spent later. Their cost benefit analysis shows a 7- to -1 return on investment.

The Council; of Chief State School Officers, Washington, D.C 1961, noted that educators, psychologists, pediatricians, and parents believed that good nursery schools and Kindergartens provided valuable opportunities for children and went on to recommend that public education be available to each person who reached the age of 3 years.

Not that all research shows that, early educational experiences are necessarily beneficial to the child socially, emotionally and intellectually.

A report by O'Sullivan (1957-58) on a comparative study of two groups of children in the infant school, who had attended nursery school and those who had come to infant school straight from home, showed that there is little difference between children who have been in a nursery and those who have not.

Olson (1957) comments that both parents and professional people at times have hoped or assumed that attendance at nursery school or kindergarten would somehow be influential either in altering a child's general ability, or in assisting him to achieve greater success in subsequent years of school. The evidence is fairly clear that, there is no special intellectual or growth that affects attributable to attendance at a nursery school or kindergarten for children who have adequate nurture in their homes.

Cohen and Bagshaw (1973) in an attempt to examine the effects of preschool experiences, fifty children were tested on four areas of tests, covering 'self-help', 'communication', 'socialization' and 'occupation'. A year later, they are tested again, it was found that, there was no significant differences between the group at the end of the year. But on the 'communication' sections, they detected distinct differences between the nursery children and the control groups, and observed that the differences were greatest between those children with better home environments.

Adamson (1971), on a school readiness tests, found no important difference between the collective 'pre-school experience' group and those who had stayed at home with their mothers.

Desai (1970), studying the impact of Kindergarten education on achievement, reported no significant difference between the student who had two years kindergarten training and those who did not have with regards to handwriting, personality traits and achievements.

The review of the research in the field of preschool reiterates the need and importance of the present study, as there are number of researches pointing to differences in finding out influence of such education. There are very few researches undertaken in the field of Pre-school education in India in general and the North East Region in particular. The studies failed to investigate fully the pedagogical and organizational aspects and also varied preschool program experiences, that affect the child overall development. Only a few studies had been carried out in Assam, Mizoram and Meghalaya. In the field of pre-primary education, till now in Nagaland, no evaluative research study has been done. Therefore, it is felt highly necessary and worthwhile to

undertake an evaluative study, with a view to study the pre-school in the State of Nagaland in general and to investigate the educational program and their influence on cognitive, social and emotional development specially in Dimapur area of Nagaland.

CHAPTER III
METHOD OF STUDY

3.0 INTRODUCTION:

The present study was undertaken for the purpose of investigating, the educational programmes being organized by the pre- primary schools in Dimapur and also to find out their influence on the cognitive, social and emotional development of children attending them. The method and procedure adopted to obtain the necessary data are described in this chapter.

3.1 DESIGN OF THE STUDY:

In this study, the research method adopted was a combination of descriptive and experimental method. Descriptive survey was adopted for collecting information with regard to detail of the existing pre- primary programmes being followed by schools in Nagaland. Experimental method using a single group, pre-test and post-test format was used to obtain information on the gains made by the pre-primary pupils in the cognitive, social and emotional aspects after attending the pre-primary classes for sometime. Within this design, differences were also checked between girls and boys, children from rural and urban areas, children attending schools under different types of management, and also children from different socio-economic status backgrounds.

3.2 RATIONALE FOR SAMPLE SELECTION:

In the selection of the sample, the following factors were considered.

(a) A representative sample of schools managed by Government, private, missionary and voluntary agencies and private individuals functioning, either as attached classes to full-fledged schools or as independent pre-primary classes/ schools.

(b) Schools known as Anganwadis, managed and financed by the social Security and Welfare Department in the district of Dimapur, which are generally flexible with

regard to age of entry of children at the time of admission, and which follow the overall programme prescribed by the Central Social Welfare Board under the Integrated child Development Services (ICDS) had also to be included in the sample.

(c) A representative sample of schools located in the urban and rural areas had to be represented in the sample.

(d) Proper representation had to be given to boys and girls in the sample.

(e) Proper representation of the age group of children had also to be considered.

(f) All levels of socio-economic backgrounds had to be represented in the sample.

3.3 DESCRIPTION OF THE POPULATION AND SAMPLE:

In Dimapur, there are in all 313 institutions having pre-primary classes, consisting of 154 government primary schools, 48 private pre-primary schools, and 111 Anganwadis. In order to collect detailed information regarding the working of pre-primary schools in Dimapur, a sample of 80 schools constituting 25.56% of the population of schools, representing all types of schools under different types of management, located in rural and urban areas was selected randomly for collecting information with the help of a questionnaire prepared for the purpose. But only 65 (i.e., 20.76% of the total schools) heads of the selected schools returned the filled in questionnaires. Thus, the effective sample used in this part of the study was 65 schools.

A representative sub-sample of 43 schools forming 13.74% of the total schools was again randomly selected from the main sample of 65% schools to conduct the study on the level of performance of pre-school children. These 43 schools consisted of 18 private schools, 19 Government schools, and 6 Anganwadi centers. A sample of 221 children was taken for the study of selecting 6 to 8 children pre school depending on the

size of the class. These children represented both the gender groups and all levels of socio-economic status.

3.4 TOOLS USED IN DATA COLLECTION:

The following tools were used for collecting data in the present research:

1.A questionnaire for heads of pre-primary schools prepared by the investigator to gather data regarding the plans and programmes being followed by the schools and also the infrastructural facilities available in them:

2.A test prepared by the investigator to assess simple proficiency in language, number skill, and general knowledge of pre-school going children.

3.The children- behaviour checklist (adaptation) by Leland H.Stott,1978.

4. Socio-economic status scale-Kuppuswamy. B (1962) (Revised edition, 1981) with adaptation made by the investigator.

3.4.1. QUESTIONNAIRE FOR THE HEAD OF INSTITUTION:

A questionnaire was prepared by the investigator to study the development, history, plans and programmes being made and implemented, and the infrastructural facilities available in the selected samples of pre-primary schools. The questionnaire elicited details of information relating to various aspects of pre-schools under the following heads:

1) Identification, information of the school- name of school, year of establishment and its location 2) Management pattern of school. 3) Goals aimed to be achieved, 4) Structure of pre-primary schools – whether separate/ attached, co-education, day/ residential, admission details, medium of instruction, type of programme run and its duration. 5) Details of students and teachers-enrolment, mode of appointment of teachers,

qualifications of teachers and Head of Institution and parent-teacher association. 6) School organization pattern: working hours/days, number of periods, arrival time of teachers and students, school assembly, refreshment, medical checkup, observation of important days, academic activities, home work, recreational activities and physical education. 7) Infrastructure and other facilities provided-Buildings and rooms, garden and playgrounds, furniture and materials, sanitation facilities and library. 8) Cumulative records maintained. 9) Finance- source of finance, fee structure and expenditure. 10)Problems faced by institutions in handling problematic children. 11) Outcome of activities and programmes in relation to education of children. 12) Problems faced in running the schools. 13) Suggestions for toning up the quality of the programmes.

The statements in the questionnaire were prepared on the above aspects and these were tried out in one pre-school. Based upon the data furnished by the concerned head of institution the statements were modified and sequenced. A proforma of questionnaire for the Head of Institution is given in appendix A.

3.4.2. TEST OF PROFICIENCY FOR THE CHILDREN:

A test to assess simple proficiency in language skills, number skills and general knowledge was prepared by the investigator. The component on language skills consists of 16 items, on number skills 7, and on general knowledge (indicating a general awareness of the surrounding world), there were17 items. These items were tried out on a group of 24 children from 2 schools who had completed at least 6 months of study in he school.

Method of scoring: A score of 1 was given for each correct answer and zero for the wrong answer to items on language skills, number skills and general knowledge. The

total score on each dimension was the sum of scores obtained on all the items under that dimension. The total score on achievement (indicating cognitive development) was the grand total of dimension wise total scores. The dimension wise and overall achievement scores were used as indicators of cognitive development for the purpose of analysis in this study. A copy of the proficiency for children is given in appendix B.

3.4.3. CHILDREN'S BEHAVIOUR CHECKLIST by Leland H Stott, 1978:

Stott (1978) in analyzing children's Behaviour identified 13 variables comparable to those on Cattell's list (1950). These behaviour dispositions were considered to illustrate individual difference in early personality pattern.

Cattell described the behaviour disposition as 'source traits' of personality (cattell, 1957). They are presumed to be the" substantial and enduring dispositions of which personality is composed (Allport, 1960) A behaviour disposition is further described as on highly generalized and pervasive personal quality, which is made manifest in variety of different situations. The source traits or behaviour dispositions become established early in life. As early as 4 difference are pronounced on these traits (Scott, 1978,P315).

As it was not possible for the investigator to assess personality of children because of time factor, it was decided to obtain the information from the class teachers who during the course of their study in the schools, knew the children intimately and in detail.

The children's behaviour checklist consists 166 selected items on social and emotional behaviours of children in schools. These specific behaviours descriptions were finally segregated and grouped, in terms of mutual affinity and meaning, into eight

factors. Each factor is interpreted in terms of the generalized meaning of its constituent items, and an identifying label is attached. These factors are tentatively regarded as representing common and pervasive and child "behaviour disposition". Each has its positive and negative aspects. Children differ over a wide range in strength of each tendency from strong positive (high score) to strong negative (low score). The eight dispositions are listed as follows:

Factor A: Social Ascendance- lack of leadership

Factor B: Personal responsibility- irresponsible impulsiveness.

Factor C: Introvertive self- sufficiency-need for the presence and support of others.

Factor D: Social effectiveness- social ineptitude.

Factor E: Personal attractiveness- lack of personal appeal.

Factor F: Personal security, stability- emotional instability.

Factor G: Compulsive domination- compliant retiring (adaptability)

Factor H: Dependability- non-dependability.

These names of course were arbitrarily attached to the factors by the author of the checklist in an effort to convey as clearly as possible the interpreted meaning in each case. As the name suggests, there are some rather close relations among them. For example, factor A, "social ascendance," would seem to be similar in meaning to factor D, " social effectiveness." They also proved to be statistically correlated to the extend of +65. However, even though some factors do have meaning in common, when their constituent items are explained side by side, it is seen to have quite different areas. There

is justification for regarding them as two rather distinct behaviour dispositions (Stott, 1978, P.444).

For the present study, the eight factors were categorized into two categories as indicators of social and emotional aspects. Under social aspects were included factors A, D, E and H. Under emotional aspects were included factors B, C, F and G, both the aspects have positive and negative tendency.

Social aspects included proper performance behaviour, playing approved social roles and development of social attitudes. It includes various dimensions of social behaviour: cooperativeness, friendliness, talkativeness, dominance attitude, sympathetic and affectionate nature forgiving, protective attitude, has pleasant facial expression, beautiful features, and expressive imaginative, independent, curious and original.

Emotional aspects include the stirred up state of the person. It is indicated by a feeling of pleasantness or unpleasantness. Emotions can be indicated in a child by behaviours like ability to concentrate, to meet situations and to accept success quietly; cooperative and responsible behaviour, empathic tendency, unselfishness, not jealous, self reliant and resourceful, affective stability, restlessness, easily distracted, mischievous, even-temperedness, jealousy and withdrawal.

The checklist was carefully checked according to instruction for each child in the sample by the teacher. Then, by using the scoring key, a numerical score on each trait was obtained.

SCORING:

The letters A-H on the scoring key designate the factor, or factors, for which each item was scored. The X or its absence, in each item was the key to its scoring. Items on a

given child's checklist were counted for the factors indicated when they were checked or not checked, according to the key. The total factor score in each case was the sample count of the items designated for that factor that agreed with the key. These raw score were converted to modified standard scores with the help of a table provided with the tool (A copy of children behaviour checklist and scoring key are given in appendix C).

3.4.4 **Social-economic status scale:**

In order to measure the socio-economic status scale developed by Kuppuswamy (1962) (Revised Edition 1981) was adopted.

Social-economic status (SES) refers to broad groupings of people defined essentially in terms of amount of income a family makes. Subsumed under mode of acquisition is the general esteem in which particular occupations are held. Related to occupation and also related independently to SES is the formal education the family's main breadwinner has acquired (Deutsch, p. 234).

As Sorokin (1974,p. 88) indicates, most theories of social class "finally reduce themselves to a compound of occupational and economic bonds plus the bonds of stratification".

The scale consists of three aspects – education, occupation and income. Under each aspect there are 7 items. The educational and occupational aspects used in Kuppuswamy's scale did not required by change, but the income aspects of the same required continuous modification to take note of the change in the cost of living index which is reflected in changing patterns of salary structure of people working in state and other establishments. As such, the income limits indicated in the original scale have been modified taking into consideration the pay structure implemented in the state of Nagaland

following the recommendations of the 3rd pay commission. The income presented that is during the period of data collection ranged roughly between Rs.3000-Rs.12,000 inclusive of allowances, since allowances were added at different interval, it was presumed that the respondents have, in many cases reported their income inclusive of such allowances. Keeping these facts in view, the scores for respondent income levels were decided as follows.

Table 3.1

Modification of Income limits of Kuppuswamy's scale (1962).

Kuppuswamy's Income Limits (1962) Scale	Kuppuswamy's Income Limits (1981) Scale	Modified Values Used in the present study	Score
1.Above Rs. 1000	Above Rs. 2000	Above Rs. 7001 and Above	12
2.Between Rs. 750-Rs. 999	Between Rs.1000-Rs. 1,999	Between Rs.6001-Rs. 7,000	10
3. Between Rs. 500-Rs. 749	Between Rs. 750-Rs. 999	Between Rs. 5001-Rs. 6,000	6
4. Between Rs. 300-Rs. 499	Between Rs. 500-Rs. 749	Between Rs. 4001-Rs. 5,000	4
5. Between Rs. 101-Rs. 299	Between Rs. 300-Rs. 499	Between Rs. 3001-Rs.4,000	3
6. Between Rs. 51-Rs. 100	Between Rs. 101-Rs. 299	Between Rs. 2001-Rs. 3,000	2
7. Below Rs. 50	Below Rs. 100	Below Rs. 2000	1

A copy of SES scale is given in Appendix D.

In Kuppuswamy's scale (1962) the respondents can be grouped into five socio-economic status classes- I, II, III, IV and V, according to the total score obtained by the respondents on the basis of their educational, occupational and income status. In the present study, the respondents have been grouped into three socio-economic status classes – High, middle and low.

In order to classify the respondents into S.E.S grouped, educational qualification, occupation and income of both fathers and mothers were added up average was found. The score of each respondent was tabulated and arranged into frequency distribution table. Then the mean and standard deviation were calculated. After calculating the mean

and standard deviation, the cut off point for High, middle and low S.E.S. grouped was determined by calculating mean + S.D. and mean – S.D, as shown in the table.

Table 3.2

Mean and Standard Deviation of S.E.S. scores

Class Interval of S.E.S Scores	F
15-16	1
13-14	9
11-12	4
9-10	25
7-8	60
5-6	39
3-4	83
Mean=6.22	N=221
Standard Deviation=2.75	

Mean + S.C = 6.22 + 2.75 = 8.97

Mean – S.C. = 6.22 – 2.75 = 3.47.

The results indicated that the respondents scoring between 3.47 to 8.97 might be classified as middle S.E.S. group, those scoring above 8.97 as High S.E.S. and those scoring below 3.47 as low S.E.S. group. But, since there are no fractions in the S.E.S. Scores of the respondents, 3.47 was rounded up to 3 and 8.97 was rounded up to 9. Thus in the present study the respondents scoring between 9-16 were put under High S.E.S. group, those scoring between 4-8 were taken as middle S.E.S. group and those scoring below 3 were grouped under low SES group.

3.5 **Procedure of Data Collection**:

After selecting, and preparing the tools for research, the investigator personally met all the Head of the Institutions. The investigator also met the Deputy Inspector of Schools for the concerned Government schools, selected for the investigation. After

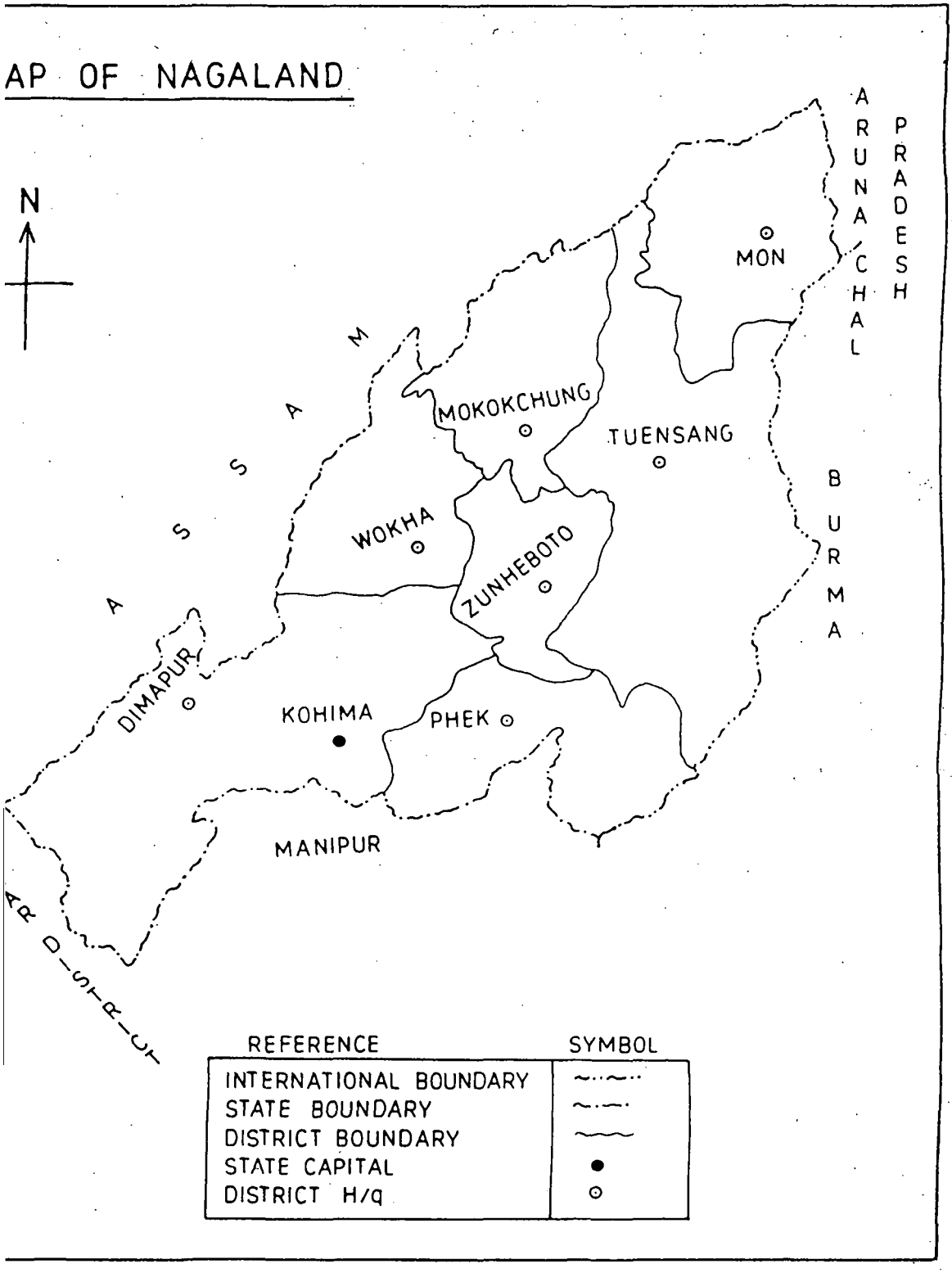
briefing, about the purpose of the study, its aims and objectives, they were asked to fill up the necessary tools giving detailed information of the school, and the same was collected on an appointed day. The investigator after taking permission visited the pre-primary classes. The teacher of the concerned class was briefed about the purpose of the study. After selecting the children, the investigator personally interviewed each child to test simple proficiency in language, number skills and general knowledge in a classroom environment. She again tested the same group of children after they had attended classes for at least six months. The teachers were also given copies of the check list to rate the children's behaviour after considering carefully the child's overall behaviour over a period of time. They were asked to check only those items, which more truly characterised the child. As the teachers are over-burdened with their duties in the school, and as the check list takes more time for marking, the investigator felt that spot collection of filled in check lists was not desirable and so, she left the copies of check list with the teachers with a request to furnish them accordingly to the time of convenience. The checklists were then collected on an appointed day. The same samples of children were again rated for a second time on a later date, after they had a minimum exposure of 6 months in the school.

The date of SES scale was included in the children's checklist. The investigator told the teacher concerned to furnish the required particulars of each children. The investigator also, went through the office files to locate the required particulars in respect of the children.

3.6 Method of Data Analysis:

The method of analysis followed depends on the nature of date and the purpose of the study. Historical-cum descriptive method was used to explain trends in development of pre-schools in Nagaland. Analysis of the data on pre and post-test and gains in achievement and changes in social and emotional development aspects was made using inferential statistics. Information regarding the institutional facilities and programmes were analysed qualitatively and in certain cases, percentages were also used to express the results.

CHAPTER IV
DEVELOPMENT OF EDUCATION IN NAGALAND



napur being a newly formed district, till date map is not available and such map of Nagaland in general is shown indicating Dimapur as its headquaters.

4.0.0 INTRODUCTION:

In this chapter, the pattern of development of education in Nagaland in general, and the district of Dimapur in particular is presented. The emphasis is on the contribution made in the field of pre-primary education by various organizations – the state government, private voluntary agencies and individuals, together with the direction of change taking place.

Nagaland became the 16th state of the Indian Union on 1st December 1963, after passing through serious and prolonged political turmoil due to insurgency. Nagaland lies between 25° 6 N and 27° 4 N latitude and between longitudes 93° 20 E and 9°15 E. The State is a hilly, land-locked region with an international boundary with Myanmar on the east, and shares territorial boundaries with Manipur in the south, Assam in the west and Arunachal Pradesh in the north. The topography of the state is very rugged and full of hilly terrain's (Nagaland Baptist Church Council, 1997). The state covers an area of 16,579 sq.km. The population of the state according to the 1991 census is 12,095,446. The state has a literacy rate of 61.30% with a male literacy of 66.09% and female literacy rate of 55.72%. The major occupation of the people is agriculture, which account for 73% of the working force in the state. Today Nagaland consists of 8 districts-Kohima, Mokokchung, Tuensang, Mon, Phek, Dimapur and Zunheboto. There are 15 major tribes inhabitating the state viz., Angami, Ao, Lotha, Sema, Zeliang, Chakhesang, Sangtam, Chang, Phom, konyak, Yimchunger, Khiamniungan, Kuki, Rengma and Pochury (Statistical Handbook of Nagaland, 1986).

Dimapur is the eighth district of Nagaland. It is one of the most rapidly progressing towns in Nagaland and is known as the "Gateway of Nagaland". Dimapur is

Dimapur is the eighth district of Nagaland. It is one of the most rapidly progressing towns in Nagaland and is known as the "Gateway of Nagaland". Dimapur is the main railway head in the state, and the main business center of the state (Maitra, 1991). The district comprises of mixed population from different communities. It may be pointed out here that detailed records on the development of education in the district, which was a sub-division till recently (4th December 1997), were not available for analysis. In fact only a few records were available. In the then Naga Hills, The British Indian administration had originally established its Naga Hills headquarters in "Samaguting" (now Chumukedima in Dimapur), which was subsequently shifted to Kohima (Gazetter of India, Nagaland, Kohima district, 1970).

Historically the Nagas, were isolated in the hills from the rest of the world for a considerable length of time. It was only in the 1830's that the Nagas came into contact with the more advanced people, and thus brought many changes in the indigenous Naga practices. As in many other states of the north-eastern region, western education was first brought to the Nagas by the western missionaries. It has been stated that the coming of the British was a landmark in thew history of educational development in Nagaland.

The educational development in Nagaland can be studied under three main phases:

(1) Educational development during pre-independence period.

(2) Educational development during post-independence period.

(3) Educational development since statehood.

4.0.1 **Educational development during pre-independence period**:

Education in Nagaland started only after the British took up the administration over India and it began with the Christian missionaries. The British government introduced western system of education with the assistance of Christian missionaries. Although the missionaries were the first agents to make an attempt to educate the Nagas by establishing schools, some sort of education was available for Nagas prior to the advent of the Christian missionaries, through an indigenous institution called *Morung*. Admission to the *Morung* was restricted to children of the age group of 9 to 11 years, who were supposed to stay in the *Morung* till they attained manhood. The educational was based on the social needs and directly linked with the needs of the days reflecting that there was social impact on education. A *Morung* was considered to be the important educational, political and social institution before the Nagas came into contact with the modern education and life.

With the coming of missionaries, and the introduction of colonial education, the indigenous system of learning, where the learning process was simple and yet practice-oriented, was disrupted and children were redirected to the new pattern of education (Pinto, 1992).

The real work in the field of education was started with the initiative of Major Francis Jenkins, the then Agent to the Governor General of North East Frontier, who being convinced that the Nagas needed special attention for bringing a change in all aspects of their lives invited the American Baptist Mission Foreign Society to work among the tribals of Assam (Preface Centennial Album 1872-1972).

pangs of miseries and other family misfortunes (preface, Centennial Album 1872-1972). The real beginning of formal education did not occur until Rev and Mrs. Clark came to Nagaland in 1872. The first formal school in the then Naga Hills was started in 1878 by Mrs Mary Mead Clark at Molungyunsen (Kiremwati, 1995).

In Dimapur, an attempt to introduce education was made by Rev King at Samaguting (now in Chumukedima), at the Head quarter of Her majesty's Troops (Pinto, 1992). However, the school was closed down due to the attacks by naga warriors. He returned to Kohima in 1881 and opened a school there in 1882, but it became defunct due to his departure in 1887. The Rivenburgs came to Kohima in the same year. Rev. Dr Rivenburg revived the school in 1889 and continued it till 1895, but the running of the school was halted due to lack of teachers (Kiremwati, 1995). Rev. Dr. Rivenburg made versatile accomplishments in medicine, leteracy and education, sparing no pains to open the way for education and enlightenment (Alemchiba, 1970).

Christian Missionaries regarded education as one of the instruments of conversion, and in the school they started, religious spirit prevailed. Where-ever there was a church of Christ established, there was a primary school opened for inculcating primary education to the children of the believers (Bendanganshi, 1993). The pupils were taught how to read and write and also rudimentary health care and Christian ethics (Kiremwati, 1995). Bible was the textbook in the school and English was the medium of instruction (Singh, 1972). The schools were in fact the mission's main evangelistic agencies. The mission did establish Middle English Schools for the purpose of bringing up church leadership (Pinto, 1992).

Education was one of the most powerful agents of British colonialism. The British officers and administration perceived the necessity of introducing Christianity and education, as they considered education as the best agency for reclaiming the rugged Nagas to order and civilization and also to train the natives for the service of colonial administration. Though, initially the British administration did not care much to open schools for the Nagas, leaving it to the care of American Baptist Missionary to educate the Nagas. The colonial educational policy was mainly directed to the extension of pecuniary grants to the Christian mission in Naga Hills. However, later in the first decade of the 20th century, the government made a significant change in its educational policy. In view of the necessity of providing healthy rivalry to schools run by the American Baptist Mission, the government gradually took over some of the mission schools and opened new schools on its own. Consequently, the number of missionary educational institutions decreased and correspondingly, the number of government schools increased, (Pinto, 1992). In 1903-4, there were 22 primary schools, 1 secondary school and 2 special schools in Nagaland. The number of pupils attending schools was only 647, while the literacy percentage was only 1.03 against a total population of about 1.2 lakhs (Yonus, 1974).

With the change of the educational policy, slowly and steadily, the government started taking over more and more of village schools. Meanwhile, during the 1930's government schools had significantly increased, but nevertheless, there was still a considerable number of mission schools in the district. In 1930, out of 167 educational

institutions, 115 were government primary schools, 36 mission-aided lower primary schools, 1 government middle English school, 2 government aided training schools (upto middle English standard) 2 mission aided primary standard and 1 government industrial school (Legislative Assembly Debates, 1938). Moreover, there was a decline in the schools and scholars; as they failed to develop a positive attitude towards school, since Nagas had a very practical bend of mind. To meet the practical type of education, an industrial school called the "Fuller Technical School" was opened at kohima for training the Naga boys in carpentry and blacksmithery in 1907 (Kiremwati, 1995).

The early missionaries worked in the face of various odds and encountering vigorous opposition carried out their education zeal by showing selfless devotion and sacrifice, in collaboration with the British administration. Gradually, there was an increase of schools in the then Naga Hills. Impur central school grew up in 1938 – the biggest M.E. school in Assam (Alemchiba, 1970).

Prior to independence, since its dawn, Naga Hills had a total of 161 government primary schools, 3 M.E schools and 2 High schools at Kohima and Mokokchung (Sema, 1986). A technical school at Kohima was also, established called "Fuller Technical School" (Kiremwati, 1995) which has now been upgraded as industrial training institute. The progress and achievement of education in Nagaland before independence was very slow and discouraging due to various reasons.

4.0.2 **Educational development during Post-Independence period**:

After the attainment of Indian Independence and the declaration of Naga Independence by Naga National Council in 1947, who demanded complete independence and refused to join the Indian Union, education could not make much progress due to

Baptist Foreign Missionaries were also made to leave Nagaland. The early 1950's marked the entry of Catholic Mission in the field of education in the State and their contribution to the growth of education was commendable. Even in the face of political unrest, enthusiasm for education was not wanning on the part of the local people who began to open more schools during these years (Kiremwati, 1995)

From 1960, educational activities were resumed with vigour. The aftermath of the cease-fire officially announced on 6th September 1964 saw a mushrooming of schools in Nagaland.The first college in Nagaland was opened by the people in 1959. It was followed by the opening of one science college at Kohima in 1961 by the people (Kiremwati, 1995). The government also laid stress on the spread of education among the Nagas, and more primary schools were upgraded to middle and high schools respectively. The demand for education increased and the enrolment figures showed remarkable increase (Directorate of Economics and Statistics, 1996). During the year 1961-62, there were 522 primary schools with 35,140 students and 139 teachers, 61 middle English schools with 11,628 students and 431 teachers, 13 high schools with 4,445 students and 181 teachers and a polytechnic Institute with 25 students and 5 teachers (from Fazl Ali College Office: Mokokchung).

The pre-independence period and a decade of post-independence period upto statehood marked two distinct phases in the history of educational development in the State. The pre-independence period, which had been an era of confusion and anxiety as to the future of the masses in the hands of the 'outside', administrators recorded very little response from the people towards the then educational programmes. While, almost a decade after the attainment of Independence had been a period of political disturbances

response from the people towards the then educational programmes. While, almost a decade after the attainment of Independence had been a period of political disturbances resulting in slower growth. The plans and schemes of the state had to be deferred during the period. In fact the Third Five Year Plan was the first plan for the state and even that was prepared on the basis of meagre statistical data, as the same was not available due to abnormal state of affairs in the State (Directorate of Education, 1967).

4.0.3 **Educational development since Statehood**:

Nagaland became the 16th State of the Indian Union on 1st December 1963. Since then, the State has made rapid strides in the field of development, both in socio-economic sphere and in artistic pursuits. The spread of education has been rapid and the State has made a remarkable progress in the field of education. The literacy rate rose to over 65% in 1991 as compared to only 18% in 1961. (India turns fifty, Souvenir, 1997).

Over the decades, since the Statehood the number of educational institutions has also increased tremendously. Prior to independence, there were only 161 primary schools with an enrolment of 35,621. However, since statehood the number of primary institutions and enrolment showed a steady increase. The following table shows the growth of primary schools and enrolment of students (primary schools include pre-primary classes) in the State since the statehood.

Table 1

Table showing the growth of *primary schools and enrolment of students (Government and private) in the state since statehood.

Sl. No	Year	No. of schools	Enrolment
1	62-63	587	35621
2	63-64	650	38468
3	64-65	721	41941
4	65-66	800	46124
5	66-67	880	49947
6	67-68	927	55239
7	68-69	947	63280
8	69-70	957	72813
9	70-71	969	79815
10	71-72	996	81271
11	72-73	1007	82754
12	73-74	1026	82959
13	74-75	1035	83329
14	75-76	1043	84837
15	76-77	1048	84957
16	77-78	1055	N.A.
17	78-79	1087	89321
18	79-80	1103	106531
19	80-81	1129	114239
20	81-82	1184	117466
21	82-83	1216	119680
22	83-84	1228	139713

23	84-85	1278	141120
24	85-86	1270	140521
25	86-87	1270	147345
26	87-88	1270	154340
27	88-89	1286	163953
28	89-90	1286	116747
29	90-91	1287	134565
30	91-92	1299	126781
31	92-93	1305	124931
32	93-94	1394	121264
33	94-95	1394	121606
34	95-96	1422	133101

Primary schools include pre-primary classes.

(Source: Directorate of education, Nagaland, Kohima, and Directorate of Economics and Statistics, Kohima (1984-1996).

The table shows a tremendous increase in number of educational facilities.It also showed an increase in the student's enrolment but however, it showed a decrease from 1989 to 1990.

Besides primary schools there were only 113 middle schools with an enrolment of 16517, 19 high schools with 5852 students and 2 colleges with an enrolment of 146. Now the state has its own university with a dozen departments, 14 government colleges, 4 professional colleges like Law, Education etc. 2 polytechnics, 3 ITI's, 35 private colleges including theological colleges. The total enrolment is about 19,000 at college level. At

school level, 4 higher secondary schools, 107 government high schools, 54 private high schools, 230 government middle schools, 3 JTT's and 700 Adult Literacy Project Centers are 3 JTT's functioning. Total enrolment is nearly 7 lakhs (India turns fifty, Souvenir, 1997). The number of trained teachers at this stage are not many and figures 93-94 showed that at the elementary stage as a while in Nagaland only 48% of teachers are trained. Teacher-pupil ratio for elementary education is one of the best in Nagaland, it being 19% in 1993-94 (selected educational statistics-1993-94). These tremendous progress has been made possible by the efforts of the State Government coupled with the inner zeal in the populace of the state, A desire to know how to read and write, and to the sterling efforts of missionaries.

In Dimapur since last 35 years, schools have mushroomed, necessitated by the population explosion. Though the first kindergarten was opened in Kohima School in 1926, more similar institutions were opened only after independence, with a spurt of such schools appearing in Dimapur only after 1980. In Dimapur District there in all 313 institutions having pre-primary classes-they include 154 government primary schools, 48 are private pre-primary schools, and 111 Anganwadis.

Education in Nagaland is mainly provided by the State Government and private bodies. Those schools under the direct control of Government are the government school and those under the private schools. Both categories of schools follow a similar syllabus/curriculum and practice the same type of teaching. The government solely finances government schools and the private schools are managed from the tuition fees or sponsored by some churches or from donations. Many of these institutions are mere classes attached to primary classes, and are termed as Class A and B. But since the 1980

academic session, pre-primary education of 1 year was provided in an attached class in every primary school. In the state, practically every government school has a pre-school class providing 1 year of education. Though pre-primary stage is not a compulsory part of school education throughout the country, perhaps out of necessity, the State Government has made it an inseparable part of primary school education. Majority of the private institutions and those run by individuals also provide pre-primary class in their primary schools.

Educational System in Nagaland:

The stages of school education in the State at present is as under:-

1. Pre-primary education: (6 years of age)	1 year	Class P.P.
2. Elementary Education (6-14 years of age group)		
a) Primary school	4 years	Class I-IV
b) Middle or Upper primary School/with or without primary Section attached	4 years	Class V-VIII
3. Secondary Education (14-18 years of age group)		
a) High school/with middle Section attached.	2 years	Class IX-X
b) Higher secondary (with High school section attached)	2 years	Class XI-XII

(*Source: Directorate of School Education, School Education status, and 1997)

The educational system in Nagaland includes school education and higher education. The school education is divided into primary, middle and high school/higher

secondary stage. The medium of instruction at the primary stage is mother tongue and English is used in the middle and high school stages. The admission depend on the readiness of the child to enter Class I. The schools use textbooks prescribed and produced by the Directorate of School and Physical Education Nagaland.

The State has adopted the National System of education, which begins from Class I at the age of 6 years. But, in actual practice prevailing in Nagaland is that a child starts his schooling with a year in pre-primary class. In private schools pre-primary sections are attached to primary schools and primary and middle sections are attached to High schools. Some schools are run exclusively for Pre-school children and admit children from 3 or 4 years of age.

The Nagaland Board of School Education conducts the High School Leaving Certificate Examination. Under the Nagaland Board of School Education there is one Board of examination, which conducts examination for class VIII. Till 1989, there was no higher secondary school in the State. But now, there are 4 government and 6 private higher secondary schools in the State (Directorate of Information and Public Relation, 1997).

In Nagaland the Directorate of Education is bifurcated into 4 separate Directorates namely, that of Higher and Technical Education, Youth Resource and Sports, SCERT and the Directorate of School Education. The Directorate of School Education looks after Pre-primary Education and Adult education, Secondary Education and Adult Education including non-formal education in the State (School education/status, 1997). The Directorate of Education is responsible for planning the development of education, opening new institutions, maintenance and administration of all institutions, qualitative

improvement of education along with the subsequent modification and the execution of various state and central schemes and programmes. In addition, it is concerned with the selection, posting and service conditions of teachers and is also responsible for collecting and processing of educational information (Directorate of School Education, 1998).

Keeping in view the fundamental principles of national Policy on Education 1986, the State of Nagaland has adopted the common National System of Education. Nagaland is moving along with the other states in school education under a national framework. As far as the literacy and development of education is concerned, the State has made significant improvement with increase in literacy percentage and number of education institutions.

The total number of schools registered with the Nagaland Board of School Education (NBSE, 1999):

Sl. No.	Type of Management	No. of Schools.
1.	Government Higher Secondary Schools	4
2.	Government High Schools	121
3.	Private Higher Secondary schools	11
4.	Regular Recognized Private Schools	3
5.	Provisionally Recognized Private Schools	78
6.	Permitted Schools	113
	Total	330

Table 2

Table showing list of schools (district and category wise)*

Sl. No.	District	Government Higher Secondary Schools	Government High Schools	Private Higher Secondary Schools	Regular recognized Private Schools	Provisionally recognized Private Schools	Permitted Schools	Total
1	Dimapur	1	17	5	2	24	35	84
2	Kohima	-	18	4	1	16	25	64
3	Mokokchung	-	17	1	-	13	8	39
4	Mon	1	9	-	-	3	5	18
5	Phek	1	18	-	-	6	6	31
6	Tuensang	1	22	-	-	7	9	39
7	Wokha	-	9	-	-	6	10	25
8	Zunheboto	-	11	1	-	3	15	30
	Total	4	121	11	3	78	113	330

(* Source NBSE, Kohima 1999).

Education is the key to all progress and pre-primary stage is the base of the entire super structure of the Educational System. It is a period when the foundation of a child's full potential is outlined and the impressions that are made on the child's mind last through out his life. It is also now and established fact that children who attend early childhood education learn much faster in the formal school than those who do not do so. Realizing the importance of early childhood education, the National Policy on Education has also given a great deal of importance to it. Though, in Nagaland inspite of the tremendous growth of education at higher levels, the efforts made in the area of pre-primary education were few and far between. The State Government realizing that, only through giving proper education can it ensure a better and richer life for the people of

Nagaland started taking initiative in implementing early childhood education through various schemes and projects.

The State, has implemented the "Universalisation of Elementary Education" concept, and to make this educational imperative a reality, early childhood education was taken up as a priority area. At present, all villages in the State have at least one school and no child has to walk more than a Kilometer to attend the primary classes (Nagaland, 25 years of growth and development, 1988). The State Government, has set up Bal Bhavans (Creative Ability Centers for Children) for providing to the children creative activities in painting, drawing, making of building blocks, carpentry, music, dance etc., for early learners, (Nagaland, 1989). A corpus fund called "Children's Education Assistance" has been set up to help needy children (Nagaland, 25 years of growth and development, 1988).

As envisaged in the National Policy on Education 1986, the Government of Nagaland have issued an order to set up Village Education Committee in all villages, to involve the local community in the management of educational institutions at primary level, and to ensure that the community actually takes part in grass root planning and administration. It will also function as a watch dog in the villages for implementation of education programmes and assist in Universalisation of elementary education (Nagaland, 1989). Provision of essential teaching and learning equipment, like furniture and other amenities has been made available to all primary and newly opened government middle schools in the State. Provision of free textbooks has been made to pupils of educationally backward areas. The State made provision of stipend for boys and girls and also other incentives to deserving students through National Talent Search Scholarship Scheme

under CSS. The government has constituted a scholarship scheme in 1998 called "Children Educational Assistance Fund", to help children from the family of poorest of the poorest (school education/status, 1997).

Centrally sponsored scheme, "Operation Black Board" and "Integrated Education for disabled Children" (IEDC) are also in operation in the State. Operation Black Board envisages in making the school more attractive by means of constructing school buildings. It also encourages the replacement of the usual learning process through Blackboard only, but support with other teaching and learning equipment. The IEDC came into being in the State during 1985-86. The main trust is to integrate the handicapped children with normal children in schools (School education/status, 1997). Promotion of girls' education in the State is given top priority and 300 girls students are being awarded special scholarship every year. Under this scheme some girl students are sent to Banasthali Vidyapith providing free education (Nagaland, 1996).

The State Council of Educational Research and Training (SCERT) is the academic wing of the Department of Education. Its main function is to plan to look after and to improve the academic functions of school education in the State (Annual Administrative Report, 1997-98). The SCERT, has already undertaken two projects, namely Early Childhood Education (ECE) and Primary Education Curriculum Renewal (RECR) under UNICEF assisted projects (Draft annual plan, 1990-91). Since 1986 the Early Childhood Education project had been involved in the training of Anganwadi workers and pre-primary teachers. The Early Childhood Education project cell has also developed impoverished, low-cost learning kits from locally available materials as learning package for each and every trainee. The SCERT also organizes programmes in

teaching methodology based on Child Centered Education for teachers. A centrally sponsored programmes, Special Orientation for Primary School Teachers (SOPT) has been implemented to train the teachers to create awareness and to enrichment their knowledge and skills. The District Institute of Education and Training (DIET) which is a centrally assisted project functioning under the SCERT, conducts the one year Under-graduate Teachers' Training Diploma course for elementary teachers from various districts in the State. Besides this, it also conducts orientation courses on all subjects (Nagaland, 1996).

The department of social security and welfare of the state implements various child welfare programme for the upliftment of children through the Integrated Child Development Services Scheme (ICDS), which is a centrally sponsored scheme and aims at providing a package of services such as nutrition and health education supplementary education, non-formal pre-school education and referral services. This scheme has been functioning in the state since 1975-76 at Zeliang-Kuki area. In the state there are 52 ICDS projects, providing services to nearly 3 lakh beneficiaries in 2687 Anganwadi centers to children of 0-6 years and expectant and nursing mothers. The special Nutrition Programme has also been set up to combat malnutrition prevailing amongst the children in the age group of 0 to 6 years and expectant nursing mothers under the supplementary feeding programmes. Supplementary nutrition is being provided to 2, 29, 395 children in the age group of 0 to 6 years and 80, 610, expectant and nursing mother. Mid day meals feeding programmes for 15, 450 school going children in the age group of 6 to 11 years was introduced during 1976 to 77 (Nagaland, 1998). Besides this the state Government has also setup recreation centers to provide recreational facilities to pre-school children

and children of lower age groups up to 16 years, and to provide indoor and outdoor games facilities. Children's parks have been set up with seesaw, merry-go-round, sliding chute etc. for children to play during leisure time (Nagaland 1988).

The Department of Social Security and Welfare has also constructed children Wards attached to Civil hospitals in the district Head quarters and one children's library-cum-museum has also been setup. Schemes such as 'Children in need of care services scheme' for foster children, juvenile home –cum-observation home for providing medical treatment and correctional services to delinquent children has also been setup. Scholarships area provided for physically handicapped students studying in class A to post graduate level (Nagaland, 1988),

In Dimapur ICDS was established in 1986-87 and there are at present 111 functioning Anganwadi centers. The Anganwadi is the focal point for delivery of the packages of services mentioned earlier to children and mothers in the villages. The Child Development Officer (CDPO) is responsible for implementing the ICDS. Health components are provided by the medical officer of Primary Health Centers. An Anganwadi worker is in-charge of an Anganwadi center and is assisted by part time helper. An Anganwadi worker has to cover a population of about 700 in her area (evaluation report on ICD in Nagaland).

A study conducted by the Directorate of Evaluation, Government of Nagaland, on the physical performance of the ICDS and its impact on the beneficiaries i.e., Children of 0-6 years of age and pregnant mothers and nursing mothers form 3 project centers – Kohima, Kikruma of Phek district, and Dimapur, found the following:-

1. It was found that no proper maintenance of important records in the CDPO Office. It was also, found that none of the Anganwadi workers maintained health card and health chart in their respective area/village. The scheme is meant for malnourished children, who belong to the poorer section of the society. But in practice it was found that, all the children who came forward were treated as malnourished and were enrolled as beneficiaries.

2. It was found from the study that, some CDPO posts were manned by untrained hands and some workers were found working without any training.

3. The monthly pay and allowances for the Anganwadi workers and helpers were too meager and one cannot meet their daily needs of life.

4. It was found, during field investigation that the Anganwadis were functioning without any supervision from the supervising officers.

5. The study reported that some CDPO centers were shifted/established according to the wishes and whims of the politicians.

6. In Nagaland most of the villages are situated in the interior places and are not connected by bus services. Therefore, lifting of materials from CDPO office to Anganwadi Center is one of the main problems.

7. Immunization against the targeted group is one of the functions of ICDS scheme. But it was found that immunization was not carried out in the Anganwadi center.

8. It was found out that, Health check up for target group of women, specially pregnant women for ante-natal care and lactating mothers for post-natal care were not carried out in any of the selected Anganwadi center.

9. It was found that from Anganwadi centers not a single woman or child of the age group 0-6 years have been referred for treatment to higher medical institutions.

10. The study found that, supplementary Nutrition food items were no longer distributed to Anganwadi centers since the 1st part of 1989. The number of feeding days also varied from place to place and found that in The number of trained teachers at this stage are not many and figures 93-94 showed that at the elementary stage as a while in Nagaland only 48% of teachers are trained. Teacher-pupil ratio for elementary education is one of the best in Nagaland, it being 19% in 1993-94 (selected educational statistics-1993-94). Most centers the number of feeding days was between 2 to 5 days.

11. The study also found out that, the quantity of equipment, materials and various kinds of items received by the Anganwadi workers in the center were not recorded.

12. Non-formal and pre-school education for children in the age group of 3-4 years is an important function under the ICDS. It was revealed from the investigation that pre-school activities were not properly implemented in all the selected Anganwadi centers. In some centers pre-school activities was yet to be introduced.

4.0.4 **The outlay and expenditure on general education under the fifth-year plan:**

After independence came the plan period and realizing the urgent need to educate the masses, the government stepped up financial allocation for education in a big way particularly for primary education as part of its efforts towards the fulfillment of the provision under article 45 of the Constitution. On the whole, after independence the number of educational institutions increased. With the emergence of Nagaland state, and since Nagaland joined the National Economic Planning, there has been a steady

educational development in various sectors. The development of education also received further attention from the State Government and the Government expenditure on Education also showed increased.

The outlay and expenditure or general education under the 5th year plan is presented below:

Table: 3

Table Showing the outlay and expenditure on general education under the 5th year plan in Nagaland.

Plan	Outlay	Expenditure (Rs. in Lakhs)
Third Plan	100	128.99
Fourth Plan	457	356.36
Fifth Plan	711	508.92
Sixth Plan	1050	1101.9
Seventh Plan	1960	2363.69
Eighth Plan	4200	4013.05
Ninth Plan	10600	*

*Total expenditure figures for the Ninth Plan is not available at the time of date collection

(Source: Government of Nagaland, Planning and Co-ordination Department),

Schemes/programmes implemented under the 5'year plan for the expansion as well as improvement of education at elementary level.

During the 3rd Plan period progress of development during the first three years was very slow due to absence of proper machinery and also due to the disturbed

conditions. But progress was quite rapid and tangible in the following years. Almost every village had one lower primary school, and at least one M.E. school was set up for every 7-8 villages on an average. During the third plan period, the schemes comprised of expansion of educational facilities, provision of equipment for the construction of library book to high schools and M.E. schools, scholarship/stipends. Stipends awarded to girl students as a special facility for girl's education and production of textbooks. (Third five-year plan, Annual progress Report).

During the 4th plan period, based on the Report of Education Commission 1964-66, and the National policy on Education, the State adopted the following principles.

1) Transformation of the pattern of education to relate it to need of the people.
2) Sustained and intensive efforts to improve the quality of education at all stage.
3) Continuous effort to expand educational opportunities.
4) Development of science and technology.
5) Cultivation of moral and social values.

The general educational policy for the 4th plan period covered –

1) Free and compulsory primary education for the children of the age group upto 14 years.
2) Increase in status, amenities and education of teachers with special emphasis on in-service training.
3) Improvementation of facilities in the educational institutions, such as better building, furniture, teaching aids, libraries, science laboratories etc.
4) Improvement of curricular, method of training and evaluation.

5) Promotion of physical education, development of sports and other youth welfare measure.

6) Improvement of supervision and inspection of schools.

7) Facilities for work experience and transformation for education and cultural bias.

The state, during the 4th plan achieved utmost saturation point in respect of L.P schools expansion. But much could be visualized in respect of M.E and high schools. The programme under the 4th plan had been consolidation and quantitative improvement rather than expansion. The expansion programme included opening of 30 L.P schools (Class A to IV) and 25 higher primary schools (Class V-VIII) and also 5 secondary schools (draft Fourth five-year Plan 1969-74).

During the 5th plan period, there were 951 L.P schools, 133 M.E schools with an enrolment of 77, 800 students in L.P schools and 23, 073 students in M.E schools (provisional figure) The teacher-pupil ratio at the L.P stage was 1:30 and it was 1:13 at the middle stage. 3 training institutions for junior teachers were set up, and a part from institutional training, reorientation training and provided by organizing camps summer/winter institutes etc. Besides, Financial assistance was also provided to under-matric L.P. teachers who were appearing for matric exams. Text book for L.P. Stages were published in 10-12 different local language and were supplied at nominal price to the students in Kohima and Mokokchung, and free to those in Tuensang district. The number of girls in the schools also showed an increased enrolment; as a result of the incentives like special provision for awarding stipends, construction of hostels, including provision for games and sports.

In this plan period provision was made for promotion of sports and games and emphasis had been given on construction of stadium, school playgrounds, appointment of physical instructors, expansion of Bharat Scouts and Guides Movement etc. To make education more purposeful, provision was made for setting up school gardens for training in agricultural and horticultural practices, carpentry units were added to M.E. Schools and high schools. Provision was also made for training in knitting and tailoring for girls (fifth five year plan, 1976).

During the 6th five-year plan, the principal objective was to achieve –

i) Removal of unemployment and under-employment.

ii) Rise in the standard of living of the poorest section of the population.

iii) Provision of some of the Basic Minimum needs of the people in low-income groups like drinking water, adult literacy, elementary education, health care, rural roads etc.

iv) Self sufficiency in food-grains

In achieving the objective of 100% enrolment in the age group 6-14 by 1990, non-formal education supplement in realizing the targeted objective. The percentage of enrolment, during this period achieved a satisfactory coverage of 120 percent in the age group of 6-14 and in the age group of 11-14 years the overall percentage of enrolment increased to 89.2, Education upto Class V was made free in Nagaland, and the new educational pattern of ten plus two was introduced from the primary stage onwards. The state had made good progress in the field of education and percentage of literacy rose to 41.99 in 1981 from 27.4 in 1971. The primary schools rose from 1051 to 1083 and

middle schools from 201 to 232, by the end of the 6th five-year plan (Draft annual plan, 1981).

During the 7th five-year plan, the first ever attempt was made to provide facilities for pre-primary education. 25 pre-primary teachers were provided to primary schools along with playway learning materials. 25 schools were to be covered in 1989-90. Additional enrolment achieved during the 7th plan was 29.8 thousand in lover primary (I – V) and 36.1 thousand in upper primary (VI-VIII) stage. Additional enrolment of girls in these stages was 15.0 thousand and 19.0 thousand respectively.

36 lower primary schools and 18 upper primary schools were established by the government in 1988-89 and in addition planned to cover some more schools by 1989-90. 251 lower primary and 43 upper primary schools were upgraded to Class IV and Class VII levels respectively. It was planned to cover more such schools by the end of the plan period.

147 additional posts of teachers for lower primary and 84 posts for upper primary schools were created to cater to the additional enrolment made and another 53 posts were planned to be created by the end of the plan period.

Stipends were awarded for 200 boys and 200 girls, annually on merit-cum-means basis among the upper primary students. Science equipment was provided to upper primary schools. Grants were given to Nagaland Board of school education for conducting class VIII examinations. Ad hoc grants-in-aids was also provided to lower primary and upper primary schools both in cash and kind, including building grants in very deserving cases. 117 lower primary and 100 middle schools benefited from this scheme.

Amenities in the forms of library books, teaching aids furniture and sports goods were supplied to the government schools during the plan period, benefiting 500 primary and 226 upper primary schools. 7 District Assistant Education Officer cum District Inspector of school, offices were being strengthened with additional manpower. 12 schools complexes were started during the 7th plan with a total nominal expenditure of Rs. 1.00 lakhs annually (Draft annual plan 1990-91).

During the 8th five-year plan, the emphasis was for consolidation, strengthening and qualitative improvements of the facilities created during the earlier plans, leaving no scope for further development. The National Policy on Education (NPE) 1986 revised in 1992, and "Education For All" (EFA) Delhi Summit Declaration, 1993 were the guiding factors for both state and central government in view of education being placed in the concurrent list. The 8th plan target was mainly on Universalisation of elementary education (UEE) as part of fulfilling of constitutional obligation under Article 45 of the Directive Principles of the Constitution. The target of UEE, set to be achieved by the turn of the century, and the revised NPE, 1992 being the guiding factor, the areas of thrust was made on Universal access, Universal retention, and Universal achievement. During the 8th plan, 50 new primary schools were opened in recognized villages not having primary schools and 46 middle schools, and 44 government High Schools was started over different parts of the entire state. (Draft eighth five-year plans 1990-95).

The ongoing 9th five year plan has a special significance from amongst all the plans, specially for the school education sector since, the school education department deal with human resource development (HRD), and as the plan period is going to lead into the 21st century. Secondly, there is no way or means to stop the children from

growing, as such the Department has to gear up its available resources to meet the needs of the people by allocating reasonable outlays.

The most elusive dream of Universalisation of Elementary education (UEE) envisaged by the Constitutional framers, in 1950, continued to bother the nations upto the 8th five year plan period. To turn this dream into reality, before the turn of the century, new schools have to be opened to make the educational system available within reach of the target groups of children. At the same time the existing schools are also to be strengthened.

In line with the policy of the Government of India, Nagaland Government too has committed to achieve Universalisation of Elementary Education (UEE) by 2000 AD. Therefore, the most important aspect of the 9th plan for the State is to fulfill the 3 main components of UEE within the first 3 years. Namely – Universal access, Universal enrolment, and Universal retention of children upto 14 years, thus ensuring a minimum level of learning to all. Besides, strengthening of inspection, monitoring and evaluation, increasing the ratio of middle schools to primary schools to 1:2 from the present ratio 1: 4, training and re-training of teachers to equip them with the ever changing school syllabi and curriculum and opening of more higher secondary schools and introduction of vocational training at +2 level will also be accorded due priority (Ninth five-year plan, 1997-2002, Vol. II).

Educational facilities made available to the people from the third plan onwards to Eighth plan are as follows.

Table: 4

Table showing the educational facilities made available to the people from the third plan to eighth plan.

Type of School	Plan Period					
	3rd	4th	5th	6th	7th	8th
1.Primary school	800	906	1009	1047	1154	1254
2.Middle School	98	138	202	188	224	232
3. High School	23	37	45	48	72	112
4.Higher Secondary School	-	-	-	-	-	4

(Source: Directorate of school education and 9th plan/school education).

The table shows a steady increase in the number of educational facilities made available to the people in primary schools, middle schools and high schools. But, however, the trend showed decrease among the middle schools during the sixth plan period. The Table also indicates that, higher secondary educational facilities were available only from the 8th plan period.

Sectoral outlay for elementary education 1968-69 to 1997-98.

The following table shows the sectoral outlay for elementary education.

Table 5

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Table showing sectoral outlay for elementary education.

Sl. No.	Year	Amount Plan	Non-Plan	Total (Rs. in Thousand)
1	1968-69	-	105.71	105.71

2	1969-70	-	157.69	157.69
3	1970-71	-	161.86	161.86
4	1971-72	-	171.04	171.04
5	1972-73	-	182.86	182.86
6	1973-74	26.30	185.52	211.82
7	1974-75	20.97	210.74	231.71
8	1975-76	22.48	365.69	388.17
9	1976-77	36.00	324.14	360.14
10	1977-78	49.22	362.64	411.86
11	1978-79	75.48	612.50	687.98
12	1979-80	20.53	583.89	604.42
13	1980-81	103.21	654.10	757.32
14	1981-82	75.13	682.17	757.30*
15	1982-83	79.68	933.74	1013.46
16	1983-84	96.99	988.63	1085.62
17	1984-85	127.92	1203.14	1331.06
18	1985-86	62.30	1,645.18	1,707.48
19	1986-87	82.10	1,717.32	1,799.42
20	1987-88	135.40	1,774.75	1,910.15*
21	1988-89	183.20	2,233.05	2,416.25
22	1989-90	229.73	2,327.04	2,556.77
23	1990-91	240.50	2,354.45	2,594.95*
24	1991-92	271.60	2,690.84	2,962.44

25	1992-93	262.00	3,190.06	3,452.06
26	1993-94	294.56	5,618.51	5,913.07
27	1994-95	477.68	5,740.95	6,218.63
28	1995-96	611.38	8,567.82	9,179.20
29	1996-97	681.40	5,892.87	6,574.27
30	1997-98	540.30	6,813.77	7,354.07

(Source: Directorate of school education)

*Provisional figures.

+Elementary education, including pre-primary education

*Data not available since1963-67

The table shows the sectoral outlay for elementary education (which includes pre-primary education). The plan wise for elementary education was started from 1972-73. The table also indicates that there was gradually increase in the outlay for elementary education and show the highest outlay during 1995-96. However, it showed a decrease in the outlay during 1996-97.

Nagaland today has sufficient number of schools and colleges, yet the state government has much to do in these institutions by way of building better citizens for tomorrow. Constant efforts are therefore needed to improve facilities available at these institutions, so as to allow them to absorb new ideas from all over the world and to staff them with men and women of vision, drive and a sense of mission.

CHAPTER V
ANALYSIS OF FINDINGS

5.0 **Introduction:**

Section I of this Chapter deals with the analysis of date pertaining to the pre-primary schools included in this study. It deals in detail with analysis of educational facilities and programmes of educational experience provided in the sample of pre-primary schools included in this study. The details of information have been grouped and described under the following headings:

I. Identification, information about the school: Location of the school and year of its establishment.

II. Management pattern of school.

III. Goals formulated by schools.

IV. Structure of pre-primary schools - whether separate/attached co-education, day/residential, admission details, medium of instruction type of programme run and its duration.

V. Details of students and teachers: enrolment, mode of appointment of teachers, qualification of teachers and head of institution and parent - teacher association.

VI. School organization pattern:

Working hours/days, number of periods, arrival time of teachers and students, school assembly, refreshment, medical check up, and observation of important days, academic activities, home work, recreational activities and physical education.

VII. Method of instruction followed and teaching - learning aids and materials made available in the school.

VIII. Infra-structure and other facilities.

IX. Finance:

Source of finance, fee structure and expenditure.

X. Cumulative records.

XI. Problems faced by the institutions in handling children with problems.

XII. Outcome of activities and programmes, in relation to education of children.

XIII. Problems faced in running the schools.

XIV. Suggestions/Plans for toning up the quality of work in schools.

The other two sections describe the results of analysis on the influence of pre-primary education on cognitive, social and emotional development of children attending Pre-school. For assessing cognitive development, a proficiency test involving exercises on language and number concepts as well general awareness of environment was prepared by the investigator. For assessing the nature and level of social and emotional development, the Children's Behaviour Checklist by Leland H. Stott (1978) was used the Children's Behaviour Checklist comprises of 8 factors, consisting of 166 items. For the present study, these factors were grouped into two categories, one denoting the social aspect and the other to cover the emotional aspects.

In section II the achievement level of all the children covered in the study is analyzed first to show the overall trend. Significant differences between pre and post-tests have been compared on total proficiency scores as well as on each of the three dimensions. Similarly further comparisons have been made by gender groups of the child, location of the schools where children studied and also, according to the type of management of schools.

In Section III are shown the trends in the overall scores on social and emotional development of all the children covered in the study have been indicated first. Significant

differences between Pre and Post test scores are compared in terms of total scores on social and emotional measures. Then comparisons have been made by gender groups of the child, location of the schools where the children studied, and also according to the type of management of school.

Section I

5.1.0 **Facilities and programmes of educational experiences in pre-primary schools:**

5.1.0.1 **Identification, information about the school:**

Information about the location of the schools and year of establishment is covered in this part of analysis.

Out of the total sample of 65 schools chosen for the study, it was found that, the earliest school was established in 1912 and the latest school in 1996. It was also found that, most of the schools were established after Nagaland attained statehood, with a spurt of such schools taking place after 1980. According to the year of establishment, the schools were grouped broadly into two categories, established before - statehood and after - statehood. The broad category was further divided into three period sub-categories. The number of schools coming under the two categories is as follows

Table 5.1

Establishment of Pre-primary schools in Dimapur.

Year	Before Statehood in 1963	Post statehood period		
		1963-1973	1974-1984	1985-1996
No. of Schools	13	10	13	28

*Information from one school was not available.

The study also revealed that, out of these 65 schools, 38 schools were located in urban areas and 27 schools were located in rural areas. This may be due to the concentration of school going children in urban areas.

5.1.0.2 **Management pattern of school:**

This part of analysis shows the management body of the schools covered in the study, and whether the schools are recognized/registered.

Table 5.2

Table showing different types of management of pre-primary schools in Dimapur.

Government Schools	Anganwadis Under State Social Security and Welfare Department	Private schools	
		Missionary and Voluntary Agencies	Private individuals
24	6	7	28

The total 65 schools chosen for the study were grouped broadly into three categories according to management as Government, Anganwadis and Private schools. Out of these 65 schools, 24 schools were under Government management, 6 Anganwadi Centres under the State Social Security and Welfare Department and the rest were under private management. Out of 35 private schools, 7 schools were under missionary and voluntary bodies, and 28 schools were owned by individuals.

The study also found out that, 6 Anganwadi Centers were recognized by the State Social Security and Welfare Department, as they are part and partial of Integrated Child Development Scheme (ICDS). The schools other than the Anganwadis, 12 schools were

recognized, 6 were registered and 41 schools were register and recognized by Director of School Education, Nagaland.

5.1.0.3 **Goals of pre-primary education**:

The following table shows the goals of pre-primary education as stated by the headmaster.

Table 5.3

Table showing the goals for pre-primary education as stated by the headmasters.

Sl. No	Goals	No. of Schools
a)	To attain emotional maturity	15(23.08%)
b)	To develop intellectual growth	46(70.77%)
c)	To develop social attitudes and manners	40(61.54%)
d)	To develop good health habits	34(52.31%)
e)	To develop motor behaviour	19(29.24%)
f)	To develop precision and fluency in speech and Language	19(29.24%)
g)	Any-	
	(i) To develop spiritual values	3(4.62%)
	(ii) As a preparation for primary school	2(3.08%)
	(iii) To impart fundamentals of academic Subjects	2(3.08%)

(iv) To attain the ability and apply the knowledge in real life	1(1.54%)
(v) To learn to serve	1(1.54%)
vi) In laying a good foundation	2(3.08%)

The above table indicated that, in most of the schools, developing intellectual growth was the main goal. Developing social attitudes and manners (61.54%) and developing good health habits (52.31%) were also the goals of most of the schools. The study also revealed that, attaining emotional maturity, which is one of the most important aspects in the development of the child, only 15 schools (i.e. 23.08%) had considered it as an important goal for pre-primary education.

5.1.0.4 **Structure of pre-primary schools**:

In this part of the study, details on whether the school runs as separate/attached, co-educational, day/residential, admission details, medium of instruction type of programme and duration run in the schools are covered. Enquiry into the structure of the sample of schools revealed that, 9 of these including the Anganwadi Centers were separate schools established for imparting pre-primary education alone; while 56 schools were attached either to a primary, middle or a high school. English, either alone, or in combination with local was used as a medium of instruction in 63 schools, and only in 2 Anganwadi centers local language was used as the only medium of communication. The following table shows the structure of pre-primary schools in Dimapur.

Table 5.4

Analysis of the data on school structure of pre-primary school in Dimapur

	Separate Pre-primary Classes	Attached to other schools	Co-Education	Day	Resid-ential	Day/Resi-dential	English Medium	Local	Other
No. of Schools	9	36	65	50	-	17	63	30	5

i) Investigation further into the type of school it was indicated that, all schools were co-educational, 50 of them were day schools and 17 schools acted as both day/residential schools.

ii) Further, the study revealed that, out of 17 schools providing both day / residential modes had hostels of their own, 11 schools provided single bed accommodation, 5 schools provided bunk bed accommodation, and 1 school provided single, bunk and double bed accommodation.

Enquiry into the games facilities made available in the hostel, 7 schools provided indoor games, 4 schools provided table tennis, 3 schools provided carom, 2 schools provided outdoor games, 7 schools provided facilities for volley ball, 7 schools provided basket ball, 3 schools provided cricket, 6 schools provided badminton, and 7 schools provided football game facilities.

Regarding the type of food supplied, 16 schools were fully satisfied with the food provided. Only 1 school was partly satisfied with the food provided.

Regarding health care provision made,3 schools reported no health care facility, 6 schools provided for medical check up by registered doctors/nurses; 1 school provided filtered water facility, 1 school provided first aid facility and 2 schools had provision to admit children to the nearest hospital, if any of them were sick.

Out of 17 schools, 15 schools provided special coaching classes to the boarders. In all the hostels, boarders were helped by the teachers/wardens in completing their homework.

Age of admission:

The age of admission varied in various pre-primary schools. Only 5 schools admitted children below 3 years. 17 schools admitted children at the age of 3 +, 30 schools admitted children at the age of 4 +. 7 schools admitted children after the age of 5 +. However the Anganwadis admit children from 0-6 years.

Mode of admission:

Investigation revealed that, 26 schools simply admit all applicants into elementary sections of the pre-primary stage, 30 schools used personal interview as a tool for admission, 26 schools used written test, while in 14 schools parents were interviewed and only in 1 school, the lottery system was used as a mode of admission.

Name of the course:

The Pre-primary classes were known by different names in different schools. 18 schools termed the first one year as 'pre-primary class', 39 schools termed the first and second years as 'class A' and 'class B' respectively, 4 schools termed the first 3 years as 'nursery' 'class A' and 'class B', 1 school termed first 3 years as 'pre-nursery', 'nursery' and L.K.G respectively and the 6 Centers run by the State Social Security and Welfare Department are termed as 'Anganwadis".

Number of sections run in the school:

Information was sought regarding the number of sections run in the different schools. It revealed that 52 schools had only 1 section each, 15 schools had 2 sections

each, 2 schools were with 3 sections each, and all the Anganwadis had no sections and functioned as single section institutions.

Duration of Pre-primary education:

The duration of pre-primary education offered in the schools was not uniform. 15 of the schools offered a year's programme, 39 schools followed a 2-year pattern and 5 schools run pre-primary classes for 3 years.

5.1.0.5. **Details of student and teachers**:

A detailed study of the student's enrolment, number of teachers, mode of appointment of teachers and qualification of head of institution and teachers are covered.

Enrolment of the students:

The enrolment varied from school to school with the lowest figure being 12 and the highest being 339 in any single school. The total number of children undergoing pre-primary in one or more years of the set up in the sample of schools was 4,772 with 2682 boys and 2090 girls. The following table shows the enrolment data of the schools in the study and also, number of teachers in each school.

Table 5.5

Enrolment data of the pre-primary schools and number of teachers in the study

Sl. No	Name of Schools	Pre-Nursery		Nursery		Lower Class A		Upper Class		Total	No. of Teachers
		B	G	B	G	B	G	B	G		
1.	Holy Cross High School					90	60	88	60	298	2
2.	Sharon High School					21	7	60	9	53	4
3.	Ram Janaki high School			18	9	50	21	50	27	148	3
4.	Tiny Tots School					10	5	12	8	35	2

5.	Neingulie Memorial High School					6	6	11	4	27	2
6.	Assembly of God			20	23	27	27	25	21	100	3
7.	Kindergarten School					4	5	1	2	12	2
8.	King David School					14	18	19	9	60	2
9.	Eden English School					12	6	9	12	39	4
10.	Christ King School					26	46	29	37	138	2
11.	Little Star School					5	8	41	31	85	4
12.	Mother Mary School					14	8	12	17	51	4
13.	Cambridge School					15	10	17	9	51	4
14.	New Horizon School					12	8	13	7	40	4
15.	Lorna's School					12	13	10	17	52	2
16.	Dimapur Mission School					13	17	24	9	63	4
17.	Assisi School					33	36	41	26	136	2
18.	Pilgrim Nursery School					13	12	12	13	50	4
19.	St.Edmund's School					6	4	4	7	21	3
20.	Namghar English School					14	8	11	9	42	4
21.	Lima Aier Memorial School					15	10	17	11	53	4
22.	St. Mary's Montessori School	20	18	70	50	65	40			263	4
23.	Dimapur Public School					5	4	2	5	60	2
24.	Don Bosco School					100	68	96	75	339	4
25.	Unity Christian English School					22	26	23	18	89	4
26.	St. Paul School					63	99	95	66	323	4
27.	Green Wood School					28	34	38	24	124	2
28.	Christ King School			3	0	11	15	11	16	53	3

29.	Livingstone Foundation School					16	13	24	13	66	4
30.	St. John Higher Secondary School					3	4	9	6	22	4
31.	Little Angel School					15	19	12	14	51	4
32.	Godwin School					44	36	40	37	157	2
33.	Vision Home School					14	9	15	11	49	4
34.	Trinity School					15	7	15	17	54	3
35.	Breeze School					7	2	3	2	14	2
36.	Gps, Burma Camp					28	20	18	14	80	2
37.	Gps, Duncan (Ao)					15	18	12	14	59	2
38.	Gps, Town					33	18	23	17	91	3
39.	Gps, Nuton Basti					14	12	10	06	42	4
40.	Gps, Purana Bazar					9	9	9	7	34	4
41.	Gps, Lhomithi Colony					7	5	4	3	19	4
42.	Gps, Daroganjan					12	5	10	10	37	2
43.	Gps, Nagarjan					17	18	13	7	55	7
44.	Gps, Sarbura					9	11	8	9	37	5

		Pre-Primary					
		B	G				
45.	Gps, Midland	13	8			21	5
46.	Gps, Duncan(Lotha)	18	12			30	4
47.	GMS, Lingrijan	28	32			60	2
48.	Gps, Padum Pukhari	19	22			41	2
49.	Gps, Diphupar(Ao)	18	13			31	5
50.	Gps, Ao Yimti	8	10			18	1
51.	Gps, Dobagoan	33	24			57	2
52.	Gps, Naharbari	20	8			28	1
53.	Gps, Signal Angami	11	16			27	4

54.	Gps, Showuba	13	12			25	4
55.	GMS Sangtamtila	4	12			26	7
56.	Gps, Naga United	58	30			88	4
57.	Gps, Chumukedima	40	42			82	11
58.	Gps, Singrijan	28	30			58	2
59.	Dimapur Railway School	40	30			70	1
60.	Anganwadi, Island Colony	40	35			75	1
61.	Anganwadi Neisatuo Colony	60	80			140	1
62.	Anganwadi, Nepali Kashiram	30	35			65	1
63.	Anganwadi, Darogapathar	27	25			52	1
64.	Anganwadi, Ao Yimti	50	30			80	1
65.	Anganwadi, Duncan B	40	30			70	1
Grand Total		Total Boys=2682 Total Girls=2090				4,772	232

Teachers:

Every pre-primary including the Anganwadis reported that at least one teacher was in position. Investigation revealed that, there were 232 teachers, out of whom 139 were in private school, 87 were government schoolteachers and 6 Anganwadis helpers. It was also revealed that, 8 schools (12.13%) had teachers strength below 2, 26 schools (40.00%) had teacher strength between 2 - 3, and 31 schools (47.69%) reported to have more than 3 teachers.

The study revealed that, out of a total of 232 teachers working in the sample of schools, 189 (81.5%) were females and only 43 (18.5%) were males. 50 (21.55%)

teachers were graduate, 68 (29.31%) were pre-university passed and 33 (14.22%) were under matric. Out of these schools, only 18 teachers (7.75%) had undergone special training in pre-primary education. There were also 20 female's helpers and 2 male helpers working in these schools.

Mode of appointment of Teachers:

The study found that, different schools followed different modes of appointment of teachers. 23 schools (35.38%) followed written test for the purpose, 31 schools (47.69%) conducted personal interview, 44 schools (67.69%) selected their teacher through contact by the authority, and in 9 schools (13.85%) they were selected by the head of institution.

Head of institutions:

All the schools covered in the Study reported have full time head of institution.

The details of qualifications of the Heads of the institutions of Pre-primary schools in Dimapur are shown in the following table.

Table 5.6

Details of qualifications of heads of pre-primary schools.

Educational Qualification	No. of Schools	Special Training in Pre-primary Education	No. of Schools
MA(POI)	1	6	6
M.A(MISSIONOLOGY)	1		
M.A PGDES (CIEFL)	1		
M.A.B.ED	1		
M.SC.B.ED.	1		
M.A	3		
B.SC, B.A, B.ED	1		

B.SC, B.ED	2		
B.COM.	9		
B.SC.	3		
B.A(Hons)	2		
B.A (Passed)	1		
P.U (Passed)	18		
Read Up to Class IX	7		
Read Up to Class X	1		
Under Matric	9		
	4		

The responses showed that, there were 36 male and 29 female heads of institutions. 18 of them (29.69%) were graduates and 9 possessed B.A Bed degree (13.85%). But it was significant to note that only 6 (9.23%) had undergone special training in pre-school education.

Parent - teacher Association:

Parent-teacher association plays an important role in helping the children to learn by providing the best possible support for the young child's optimal growth and development. The following table shows the, analysis of data on Parent-teacher association in pre-primary schools in Dimapur.

Table 5.7

Table showing various modes of parent-teacher contacts.

Sl. No	Mode of Contact	No. of Schools
1.	Maintain parent-teacher association	33
2.	Arrange get together of parents and teachers	42
3.	Observed parents day	32
4.	Celebrated Annual School Day at which parents were invited	43
5.	Teaching Staff makes regular home visits	25
6.	Schools Arranged meetings/interviews with parents	33

The study reveals that 33 schools maintained parent-teacher association, 42 schools arranged get together of parents and teachers, 32 schools observed parents day, 43 schools celebrated annual school day at which parents were invited. Teaching staff from 25 schools made regular home visits and 33 schools arranged meetings/interview with parents.

5.1.0.6 **School organization pattern**:

In school organization pattern, a detail study on the working days/hour, number of periods, arrival time of teachers and students are covered. The following table shows the

details of working days/hours, number of periods, duration of periods and arrival time of teachers and students.

Table 5.8

Table showing the data on working days/hours, number of periods duration of periods and arrival time of teachers and students.

Items of information	Categories of response	No. of Schools
Working Days	6	59
	flexible	6
Working hours per day	4 hours or more	43
	less than 4 hours	22
Number of period per day	6 hours or more	33
	less than 6 hours	26
	flexible	6
Arrival time of teachers	7.00-7.30 A.M	9
	7.30-8.00 A.M	34
	8.00-8.30 A.M	22
Arrival time of students	7.00-7.30 A.M	12
	7.30-8.00 A.M	35
	8.00-8.30 A.M	18

Working days /hour:

All schools observed a 6-day week working schedule, but a Saturday they worked for only half day. When schools organized mostly co-curricular activities.

Working hours per day varied from school to school. 43 schools (66.15%) worked for 4 hours or more and the rest (33.83%) worked for less than 4 hours. However, in Anganwadi Centers, the working days and hours of work were flexible depending on the availability of the Anganwadi workers.

Number of periods:

The Study showed that, the whole working hours were divided into more than 6 periods in 33 schools, less than 6 periods in 26 schools and the 6 Anganwadi Centers did not follow any fixed pattern.

Duration of periods also, varied from school to school. In 45 schools (76.27%) the duration of periods was 35 minutes or more and in the rest (23.73%) of the schools the period duration was less than 35 minutes.

Arrival time of teachers and students:

The Study revealed that, the arrival time of both teachers and students varied from school to school. In 9 schools (13.84%) the teachers arrived in between 7.00 - 7.30 A.M., 34 schools (52.31%) teachers arrived between 7.30 - 8.00 A.M, in 22 schools (33.51%) the teachers arrived between 8.00 - 8.30 in the morning.,

In 12 of the schools (18.46%) the children arrived in between 7.00 - 7.30 in the morning, 35 schools (53.84%) the children arrived between 7.30 - 8.00 A.M and in another 18 schools (27.69%) the children arrived between 8.00 - 830 A.M.

School assembly, refreshment, medical check-up, and observation of important days by pre-primary schools:

The following table shows details regarding school assembly, food/refreshment, medical check-up and observation of important days by the schools.

Table 5.9

Table showing details regarding school assembly, food/refreshment, medical check-up and observation of important days by the schools.

School Assembly	No. of Schools	Food/Refreshment	No. of Schools	Medical And Health Checkup	No. of Schools	Observation of Important Days	No. of Schools
With songs and prayer in the morning	39	Free	10	Personal hygiene	16	Yes	46
With songs and prayer inside the classroom	1	Charge	5	Checking height and weight	2	No	19
With songs and prayer at the end of the schools day	1			Checking physical fitness	3		
In combination with the above three items	15			Medical checkup by qualified Doctors	4		
				In combination with the above four items	21		

Information gathered from the heads of schools showed that, 56 schools organized school assembly every day. Out of these 39 schools (69.64%) organized assembly with songs and prayers in the morning. 1 school (1.78%) organized assembly, with songs and prayer inside the classroom. 1 school (1.78%) organized assembly, with songs and prayer at the end of the school day and the rest 15 schools (26.78%) organized in combination with some in all of the other items stated above. In 9 schools, school assembly was not organized.

Regarding food/refreshment provided to students in the school. Only 15 schools reported that refreshments were provided to children. Out of these, 5 schools charged for the refreshment and 10 schools provided it free. In other schools the students brought their tiffin from home.

The study also showed that, 46 schools provided medical check-up and health facilities in school. Out of these 16 schools (34.78%) took care of the personal hygiene of children, 2 schools (4.35%) checked their height and weight, 3 schools (6.52%) checked their physical fitness, 4 schools (8.69%) arranged for regular medical check-up by qualified doctors and the remaining 21 schools (45.65%) arranged in combination with the above stated items. It is significant to note that in 19 schools no facilities for medical check-up and health care were made available.

The study also revealed that 19 schools reported that they did not observe any national/local holidays, but the remaining 46 schools observed all holidays approved and notified by the Nagaland Government in addition to some other local or restricted holidays.

Academic Activities:

The academic activities organized by schools varied from school to school.

The following table shows the analysis of academic activities of pre-primary schools in Dimapur.

Table 5.10

Table showing the subjects of study and learning materials used in the pre-primary schools in Dimapur.

Class	No of Subject	No. of Schools	No. of Text books used	No. of Schools	No. of Exercise books used	No. of Schools	Additional books used	No. of Schools
Lower Sections	3	2	3	7	2	3	Diary	30
	4	10	4	26	3	21		
	5	19	5	12	4	22		
	6	18	6	9	5	6		
	7	9	7	3	6	5		
	8	1	8	2	7	1		
					Slate	1		
Upper Sections	4	5	3	2	2	2	Diary	35
	5	10	4	8	3	10		
	6	12	5	10	4	17		
	7	7	6	12	5	4		
	8	4	7	5	6	6		
	9	4	8	4	7	3		
	10	1	9	1	8	1		
	11	1	10	2	9	1		

The study reveals in some lower sections of pre-primary schools, the pupils had as many as 8 different subjects of study whereas, in some school they had only 3 subjects.

Fig: 2 Showing children attending to different academic activities in the class.

Children being assisted by the teacher in their class work.

Children saying numbers assisted by the teacher.

Fig: 3 Showing children attending different academic activities in the class.

Children scribbling on their slates.

Children reading from their text book.

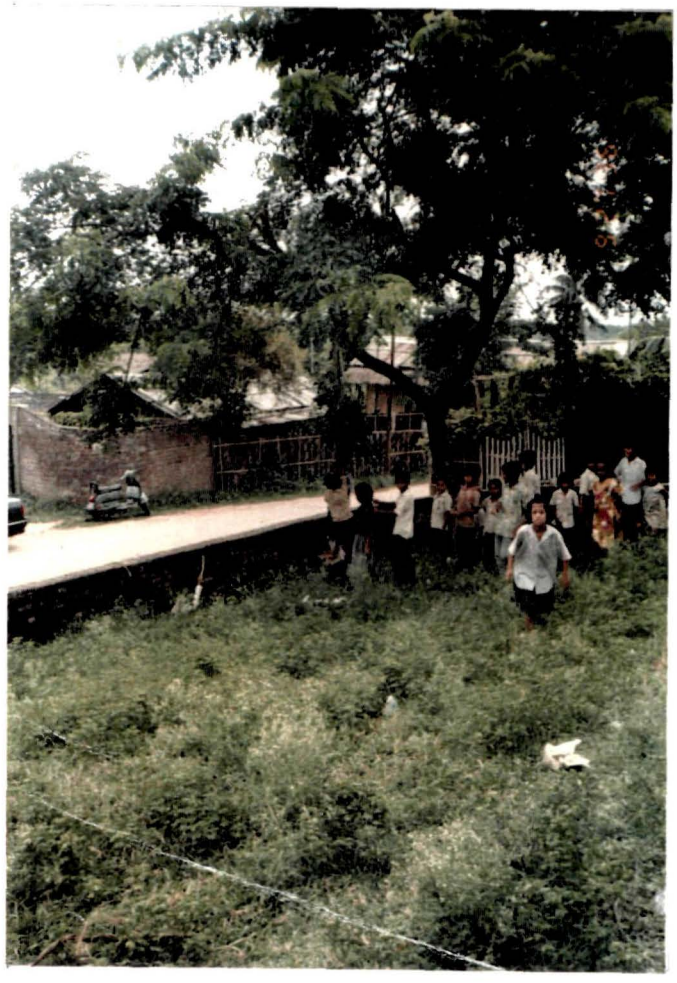
Fig: 4 Showing children engaged in indoor activities.

Children singing an action song.

Children engaged in an educative game.

Fig: 5 Showing children at outdoor activities.

Children playing tenniquot.



Children on a swing with friends.

Further, one school did not prescribe any exercise books, but used only slates. However, in upper sections, 1 school had as many as 11 subjects whereas, in some schools, they had only 4 subjects. In 1 school, they prescribe only 2 exercise books.

Regarding additional books, 30 schools in lower sections and 35 schools in upper sections maintain diary for the pupils. The most common subjects taught in all schools were numbers, Rhymes, conversation (spoken language), singing, drawing, hand writing and General Knowledge.

Home work:

Regular homework assignment like practice in the writing of alphabets, memorization of Rhymes, colouring etc., was being given in all schools other than Anganwadis.

Recreational activities and Physical Education:

Like in other areas, recreational activities and physical education facilities varied from school to schools.

The following table provides information regarding recreational activities and physical education facilities in the pre-primary schools in Dimapur.

Table 5.11

Table showing analysis of recreational activities and physical education in Pre-primary schools in Dimapur.

Rest Period	No. of Schools	Outdoor and Indoor Activities	No. of Schools	Individual/ Group Activities	No. of Schools
More than 30 minutes	31	Once a week	46	Once a week	36

Less than 30 minutes	7	Often	1	Often	1
		Sometimes	1		

The study revealed that, although outdoor and indoor activities, which play a crucial role for the physical and mental development of pre-primary education, no school gave importance to outdoor and indoor activities as part of daily feature. However, out of 65 schools, 46 schools organized outdoor and indoor activities at least once a week and 2 schools did it sometimes. Besides, outdoor and indoor activities 37 schools organized other forms of individual/group activities, out of which 36 schools organizes them once a week and in 1 school organized it often.

Regarding the rest periods provided to children, 38 schools reported to be providing them in their timetable. Out of these schools, 31 assigned rest periods of more than 30 minutes while the remaining 7 schools provided them for less than 30 minutes.

5.1.0.7 **Methods of Instruction followed and Teaching -learning aids and materials made available in the schools**:

The study also, examined the method of instruction adopted in the pre-primary classes and the teaching-learning aids and materials made available. The following table shows the details in this regard, method of teaching and provision of instructional aids and materials in schools.

Table 5.12

Table showing the method of teaching and provision of instructional aids and materials in schools.

Method of Teaching	No. of Schools	Teaching-learning Aids and materials	No. of Schools
Lecture	21	Puppets	4
Translation	33	Toys	16
Demonstratio	40	Paints	13
n	28	Drawing	33
Playway	19	Block building	14
Activity based		Sand plays	8
Others		Others	3
		Maps	1
		Photographs	1
		Creative aids	1
		Board and flash Cards	1

From the above table, it is observed that, Demonstration method was the most common method used by 40 schools. Translation method was another method employed by 33 schools since the medium of teaching was English.

Playway is considered to be the best method for conducting pre-primary school activities and 28 schools applied it while teaching. 5 schools used playway along as a method of instruction. Lecture method was used in 21 schools.

Teaching-learning aids are an important component of pre-primary school activities. In the present study it was found that drawings were a commonly used form aid in 33 of the schools; toys were used by 16 schools, block building material were available in 14 schools, paints in 13 schools, sand play was used by 8 schools, puppets by 4

Fig : 6. A government pre-primary school showing the poorly equipped class room.

schools; charts were used in 3 schools, 1 school each used maps, photographs, creative aids including boards and flash cards.

5.1.0.8 **Infra-structure and other facilities:**

The study investigates the infra-structure and facilities like - school buildings and classrooms, furniture and equipment's, play materials, sanitation and library facilities provided in the schools.

The following table shows analysis of infra-structure and other facilities provided in schools at Dimapur.

Table 5.13

Table showing the analysis of infra-structure and other facilities provided in the schools at Dimapur.

Facilities Provided	No. of Schools	Furniture and Material provided	No. of Schools	Library facilities Provided	No. of Schools
i)Sufficient Classrooms	49	i)Desk and chairs	55	Yes	17
		ii)Almirah	49	No	48
ii)Sufficient teacher common room	52	iii)Attendance Register etc.	55	a)Sufficient rooms	5
				b)Sufficient reading rooms	16
iii)Store room	37	iv)Ceiling Fans	37		
				c)Sufficient furniture	5
iv)Classroom design comfortable with sufficient ventilation and lighting	39	v)Dining tables and chairs	10	How used?	
		vi)Tumblers, cups, plates, spoon etc.	14	Always	5
				Sometimes	12
				Rarely	-
			36		

v)(a)Cemented floor	45	vii)First Aid Box	7		
(b)Earthen floor	5	viii)Health Card			
©Wooden floor	-		40		
		ix)Play/games			
vi)Spacious play ground	45	materials	1		
		x)Swing			
vii)Garden	22				

(a) Enquiry into the school buildings and rooms revealed that, 49 schools had sufficient numbers of classrooms, 52 schools had teachers' common room and 37 schools had storerooms. 39 rooms thought that the classroom design was comfortable with sufficient ventilation and lightening. Almost all the schools had cemented floor. 45 schools had spacious playgrounds and 22 schools had developed gardens. It was also reported that, 41 schools provided proper sanitation facilities.

(b) Investigation into the furniture and materials provided in the schools revealed that, 55 schools had desks and chairs for teachers and students. 49 schools had almirah for keeping books, 55 schools had attendance registers, chalk, dusters and blackboards, 37 schools provided ceiling fans, 10 schools had dinning tables, cups, plates, spoon etc., 36 schools had first aid box. 40 schools had play/games materials and 1 school provided swings in their compound.

(c) Enquiry into the library facilities provided revealed that, only 17 schools had library facilities. However, children used it regularly only in 5 schools.

5.1.0.9 **Cumulative Development Records:**

All schools maintained admission records showing particulars of the students such as name, father's name, address, age, identification mark, nationality, father's occupation etc.

Only 7 schools maintained health records charts, 5 schools maintained records on physical fitness, height and weight.

Many of the schools maintain academic achievement records. Investigation revealed that, 54 schools (83.07%) maintained detailed progress report, 2 schools (3.07%) maintained marks registers, 2 schools (3.07%) maintained separate records for different types of information and 7 schools (10.76%) never maintained it.

Investigating further it was revealed that, only 36 schools (55.38%) maintained information data on co-operation, 3 schools (4. 61%) maintained information on social relations, 1 school (1.53%) on leadership qualities and 1 school (1.53%) on interest pattern. While 26 schools (40%) used several kinds of information with other characteristics.

5.1.10. **Finance:**

a) **Source of finance -**

All private institutions depended upon admission fees and monthly fees collected from the students. Besides these fees, the school sponsored by the churches also received financial assistance from the respective churches. Some schools also received aid from local bodies and individual donations. The following table shows the sources of funding of pre-primary schools in Dimapur.

Table 5.14.

Table showing details of sources of finance of pre-primary schools in Dimapur.

Source of finance	Amount	No. of Schools
1. Government grants	-	-
2. Local bodies	Rs. 70,000-Rs. 10,000	2
	Rs. 10,000 and Above	1
3. Church donations	Rs. 500-Rs.10,000	1
	Rs. 75,000 and Above	1
4. Donations	Rs. 500-Rs.10,000	4
	Rs. 10,000 and Above	1
5. Fees	Below 2lakhs	4
	Between 2-5 lakhs	14
	Above 5 lakhs	5

The study revealed that, none of the schools received government grants. Only 3 schools received aid from local bodies, 2 received church donations, and 5 received donations from individuals. The investigation revealed that 23 schools depended on the fees collected from the students. Other schools in the sample did not respond to the question on quantum of total fee collection.

b) **Fees structure**:

Fee structure was broadly divided into two categories - tuition fees and admission fees, which includes games fee, library fee, building funds, books, teaching aids, music/art and others

The following table shows the fee structure in pre-primary schools in Dimapur.

Table 5.15

Table showing the analysis of the data on fee structure, in pre-primary schools in Dimapur

Tuition fees	No. of Schools	Admission fees	No. of schools
Rs.60-85	22	Below Rs.200	26
Rs.90-150	13	Between Rs.200-400	17
		Above Rs.400	15

Investigation into the fee structure revealed that, schools run and managed by the government charged only admission fees. 22 of the private schools collected fees ranging from Rs. 90 - Rs. 150 every month towards tuition fees. Besides tuition fees, all schools collected some amount towards admission and other charges. 26 schools charged below Rs. 200, 17 schools charged between Rs. 200 - Rs. 400 and 15 schools charged above Rs. 400 once a year towards admission.

c) **Expenditure:**

Expenditure of different schools, were classified into two headings i) salaries and ii) non-salaries.

The following table shows the trends of expenditure on salaries and non-salaries.

Table 5.16

Table showing the trend in expenditure on salaries and non-salaries.

Salaries	No. of + Schools	Non-Salaries	No. of * Schools
Below Rs 20, 000	9	Below Rs 1,000	8
Between Rs.20,000-Rs.40,000	6	Between Rs. 1,000-Rs.3,000	13
Above Rs. 40,000	8	Above Rs.3,000	8

+Information was provided only by 23 private schools

*Information was provided only by 29 private schools

i) Salaries:

Regarding expenditure on salaries, 12 private schools did not provide detailed information. Out of 23 schools, 9 schools spent below Rs. 20,000, 6 schools spent between Rs. 20,000 - Rs. 40,000 and 8 schools above Rs. 40,000 every month towards salaries.

ii) Non-salaries:

Expenditure on non-salaries includes maintenance, teaching aids, library and others. 29 schools provided information of which 6 were government schools. It was found that, 8 schools spent below Rs. 1,000, 13 schools spent between Rs. 1,000 - Rs. 3,000 and 8 schools spent above Rs. 3,000 every month. The study also examined, the detail break up of item wise on non-salaries expenditure, which included maintenance, expenditure on, teach aids, library and others.

The following table shows the break up on non-salaries items.

Table: 5.17

Table showing the analysis of data on the trends of expenditure on non-salaries.

Main tenance	No. of Schools	Teaching Aids	No. of Schools	Rent	No. of Schools	Others	No. of Schools
Below Rs. 1000	13	Below Rs. 200	4	Below Rs. 2,000	2	Below Rs.500	4
Between Rs.1,000-3,000	10	Between Rs. 200-500	8	Between Rs. 2,000-5,000	1	Between Rs.500-1,000	1
Above Rs.3,000	4	Above Rs.500	6	Above Rs. 5,000	2	Above Rs.1,000	4

The break up of item wise expenditure showed the following:

a) **Maintenance**: Regarding spending on maintenance, out of 23 private schools, only 21 schools spent on maintenance, 6 government schools also reported spending on maintenance, 13 schools spent below Rs. 1,000, 10 schools spent between Rs. 1,000 - Rs. 3,000 and 4 schools spent above Rs. 3,000 per month.

b) **Expenditure on teaching aids, library etc.**:

Out of 23 private schools, only 18 schools spent on teaching aids, library etc. 4 schools spent below Rs.200, 8 schools spent between Rs. 200 - Rs. 500 and 6 schools spent above Rs. 500 per month.

c) **Rent**: The study showed that, out of 23 private schools, 6 schools reported to be spending on building rent. 2 of these schools spent below Rs. 2,000, 1 school spent between Rs. 2,000 - Rs. 5,000 and 2 schools spends above Rs. 5000 per month.

d) **Expenditure on other items included miscellaneous items like electricity bill, expense on stationery items etc.**: Investigation revealed that 9 schools reported spending below Rs. 500, 4 schools spent between Rs. 500 - 1000 and an amount above Rs. 1000 was spent by 4 schools every month.

5.1.11 **Problems faced by the institutions in handling children with problems**:

Out of 65 schools, only 21 institutions reported to be finding difficulties in handling problem children. Investigation revealed that, 9 schools reported the presence of indisciplined children in their schools, 6 schools reported on children attending class with no proper books. 5 schools reported about irregular attendance of children, and 3 schools reported on laziness and indifference shown by their students with regard to their studies. Other problems reported by them included difficulty in dealing with non expressive children, problems of slow learners, and the problems in dealing with beginners during the first few days.

Further, investigation in handling and dealing children with problems revealed that heads of institution used different means like counseling, interview, disciplinary action, motivation efforts like praise, giving explanation on attendance requirements, informing parents and guardians depending on the problem, and through distribution of pencils and reading materials to poor students.

5.1.12 **Outcome of activities and programme, in relation to education of children**:

Enquiry into the outcome of activities and programmes, in relation to education of children showed varied response. But for the sake of convenience the response having common features were pooled together to offer explanations. 14 schools reported that, it tried to build and develop sound foundation for mental, emotional and social development of children, 12 schools reported that, it helped to develop good health habits and manners, 11 schools reported that attempts were made to make the children dutiful, self-disciplined and responsible; 6 schools reported that they helped children to learn the basic things as a preparation for primary class, 4 schools reported that, they tried to develop readiness, inquisitiveness, objectively, 4 schools reported to be helping children in reading and writing, 3 schools tried to help children in gaining more self-confidence, 3 schools reported that, it develops a healthy sense of competition and healthy participation; 2 schools helped children to understand the value and importance of education; 2 schools made efforts to discover hidden talents in children, 2 schools to experience the joy of learning in schools and 2 schools reported that, they helped students to make right judgement while using his/her knowledge in any situation.

5.1.13 **Problems faced in running the schools**:

In running the school, the institutions faced various problems. The following table shows the problems faced in running the schools.

Table: 5.18

Table showing the analysis on the problems faced in running the schools in pre-primary schools in Dimapur.

Sl.No	Problems faced	No. of Schools
1.	Poor response from parents	33
2.	Lack of funds	31
3.	Lack of play materials	31
4.	Lack of playgrounds	20
5.	Lack of proper building and rooms	21
6.	Apathy of Government	18
7.	Teachers not qualified	10
8.	Others	
	*Lack of opportunity for teachers to go for training	1
	*Non-payment of fees in time	1
	*Pressure from parents for admission	1
	*Shortage of teaching staffs	1
	*Irregularity of teacher	1

The study revealed that, the common problems faced in running the school included poor response from parents, lack of funds, lack of play materials, lack of playground, lack of proper building and rooms, apathy of the government, and problems in obtaining properly qualified teachers.

5.1.14 **Suggestions/Plans for toning up the quality of work in schools.**

Suggestions/Plans were sought from the heads of schools regarding toning up the quality of work in schools. The details on the analysis of suggestions provided by different schools are given below.

Table 5.19

Table showing the analysis of the suggestions/plans in toning up the quality of work in schools.

Sl. No	Suggestions/Plans	No. of Schools
1.	Provisions of play materials, teachings aids and materials	21
2.	Qualified, efficient and trained teachers	13
3.	Co-operation between parents and teachers and school administration in solving children's problems	12
4.	Sincerity, dedication and commitment of the teachers towards teaching	7
5.	Teachers should set an example by being well discipline and punctual	7
6.	Teachers and parents share the responsibility of checking the attendance, home work of the child and their progress	6
7.	Organised workshop/in-service training programme for teachers.	5
8.	Government should provide proper fund and grant-in – aid made available in time.	5
9.	Proper school building and sufficient class rooms	5

The study revealed that, most of the schools suggested provision of play materials, teaching aids and furniture, qualified teachers, and establishing co-operation between teachers and parents as most important for toning up the quality of work in schools.

Section II:

5.2.0. **Achievement development**:

Achievement level of the children attending pre-primary school was obtained with the help of a proficiency test prepared by the investigator. The proficiency test covered dimensions of achievement levels in language, numerical concepts and general awareness.

The test was administered individually by the investigator in a face-to-face setting. A score of 1 was given for correct answer and zero for the wrong answer to items, on language skills, number skills and general awareness. The total score on each dimension was the sum of scores obtained on all the items that dimension. The total score on achievement (indicating cognitive development) was the grand total of dimension-wise total scores.

5.2.0.1 **Achievement levels of children attending pre-primary schools**:

The following table shows, the overall achievement levels of all children covered in the study expressed in terms of mean score and S.D. This test was conducted soon after the children were admitted in schools, hence it may be considered, as knowledge possessed by children prior to any serious school experiences.

Table: 5.20.

Table showing the achievement level of children covered in the study.

Area Analyzed	n	Mean score of Achievement level	
		M	SD
Achievement Level	386	23.53	7.19

Table 5.20 above shows that the total mean achievement score obtained for the total sample on the proficiency test as a whole.

5.2.0.2. **Comparison of proficiency level at the pre-test and post-test of children attending pre-primary classes.**

A sample of 221 children were available for pre and post-test, who formed the actual sample for this part of analysis.

Table 5.21.

Table showing comparative mean scores on pre and post-test on achievement level of children attending pre-primary classes.

Area Analysed	n	Pre-test scores		Post test scores		Mean Difference	t	p
		M	SD	M	SD			

Total achievement score	221	26.21	7.82	32.67	5.52	6.46	10.25	.001

Table 5.21 shows that there was a significant difference (P <.001) in the gain score on overall achievement of the sample. The mean scores on post-test showed a higher mean values signifying real gain after exposure to a pre-school programme.

5.2.0.3 **Achievement level according to gender groups**:

The table below shows comparison between same gender groups in terms of their gain scores and also, comparison of girls and boys in their pre-test and post-test scores on achievement level.

Table 5.22

Table showing comparative mean scores on achievement development of pre-school children according to gender.

Location of the school	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Girls	111	(1)25.30	8.22	(2)31.78	6.30	1 & 2	6.48	6.61	.001
Boys	110	(3)27.14	7.63	(4)33.55	4.78	3 & 4	6.41	7.45	.001
						1 & 3	1.84	1.80	
						2 & 4	1.77	2.36	.05

Table 5.22 shows that both boys and girls gained significantly in their level of achievement between pre and post test. Boys showed a higher mean values both at pre and post-test than the girls. However, when they were compared, no significant difference was found at pre-test level, but a significant difference was found at post test level (P <.05)

5.2.0.4. **Achievement level of children according to location of the school where they studied**:

The schools were classified as urban and rural. Following table shows comparison between pre and post-test within the same area and also, comparison between urban and rural areas.

Table 5.23

Table showing comparative means scores on pre and post-test on achievement level of children according to the location of the school.

Location of the school	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Urban	101	(1)25.89	8.20	(2)32.58	6.04	1 & 2	6.69	6.62	.001
Rural	120	(3)26.43	7.48	(4)32.73	5.05	3 & 4	6.3	7.68	.001
						1 & 3	0.54	0.49	
						2 & 4	0.15	0.20	

Table 5.23 shows significant difference (P <.001) in the gain scores on achievement level of both rural and urban area children. But no significant difference

were found either at the pre-test stage or at the post-test stage between rural and urban area children.

5.2.0.5. **Achievement level of children according to schools under different types of management**:

The types of management under the study government, private and Anganwadis. The following table shows comparison between pre and post-test scores of children according to management of schools.

Table 5.24

Table showing comparative means scores on pre and post-test on achievement level of children according to schools under different types of management.

Types of management	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	p
		M	SD	M	SD				
Government	75	(1)26.61	5.21	(2)32.94	3.49	1 & 2	5.88	8.17	.001
Private	46	(3)24.41	6.44	(4)33.04	4.75	3 & 4	8.63	7.31	.001
Anganwadis	100	(5)26.74	9.99	(6)32.38	7.06	5 & 6	5.64	4.62	.001
						2 & 4	0.56	0.69	
						4 & 6	0.66	0.67	
						2 & 6	0.56	1	
						1 & 3	2.2	1.96	
						3 & 5	2.33	1.67	
						1 & 5	0.13	0.11	

Table 5.24 shows a significant difference in gain scores obtained by children, attending all types of management on achievement level. When different types of management were compared in terms of pre and post-test scores, no significant difference were found among children attending different types of schools.

5.2.0.6. **Achievement level according to socio-economic status of the children**:

Children included in the sample were grouped into three socio-economic status groups - high, middle and low. Significant differences were found among the same SES and also among different SES.

Table 5.25.

Table showing comparative mean scores on achievement development of children according to socio-economic status.

SES	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	p
		M	SD	M	SD				
High	39	(1)26.69	8.23	(2)36.36	5.56	1 & 2	7.67	4.78	.001
Middle	120	(3)27.01	8.05	(4)32.79	5.76	3 & 4	5.78	6.42	.001
Low	62	(5)24.37	7.38	(6)31.35	5.01	5 & 6	6.98	6.18	.001
						1 & 3	0.32	0.21	
						3 & 5	2.64	2.22	.05
						1 & 5	2.32	1.43	
						2 & 4	1.57	1.50	
						4 & 6	1.44	1.73	
						2 & 6	3.01	2.71	.02

Table 5.25 shows significant difference (P<.001) in the gain score among each of the three classes - High, middle and low on the overall achievement level. When a comparison was made between these three classes of children at pre-test level, it was found that a significant differences existed between middle SES class and low SES class (P<.05). The result also, showed Significant difference between high class and low class (P<.02) at post-test level.

In both pre and post-test, children from the low SES scored lower than children from middle and high SES.

A secondary level comparison was made to see if gains made in the component areas of achievement, namely language, numerical and general awareness also showed any significant differences between children in different schools.

5.2.0.7.0. **Language development**:

The following table shows the overall achievement levels on language of all the children, at pre and post-test level.

Table 5.26.

Table showing comparative mean scores on pre and post test on language development of pre-school children.

Area Analyzed	N	Pre-test scores		Post-test scores		Mean difference	t	p
		M	SD	M	SD			
Total language development score	221	9.22	3.32	12.05	2.83	2.83	9.76	.001

The above table 5.26 shows that, there was a significant difference (P<.001) in the gain score, between pre and post test scores on language development of the total sample (N=221) of children. The mean scores on post-test showed a higher mean value indicating a beneficial effect of the pre-school education programme.

5.2.0.7.1 **Language development according to gender**:

The following table shows, comparison between same gender groups in terms of their gain scores and also comparison of girls and boys in their pre-test scores and post-test scores on language development.

Table 5.27.

Table showing comparative mean score on language development of pre-school children according to gender.

Gender of the children	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Girls	111	(1)8.96	3.26	(2)11.60	2.98	1 & 2	2.64	6.29	.001
Boys	110	(3)9.48	3.50	(4)12.54	2.61	3 & 4	3.06	7.65	.001
						1 & 3	0.52	1.18	
						2 & 4	0.75	1.97	.05

Table 5.27 shows that there was a significant difference in boys and girls on language development when their pre and post-test scores were individually compared. When a comparison was made between boys and girls at the pre-test and post-test level, significant difference was found only at the post-test level indicating greater gain by boys.

5.2.7.0.2. **Language development of children according to location of the school where they studied**:

A comparison was made within the same area schools and also between different area schools in their post-test scores on language development.

Table 5.28.

Table showing the comparative mean score on language development on pre and post-test of pre-school children according to the location of the school.

Location of the school	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Urban	101	(1)9.13	3.30	(2)12.12	2.63	1 & 2	2.99	7.12	.001
Rural	120	(3)9.3	3.34	(4)11.99	2.82	3 & 4	2.64	6.73	.001
						1 & 3	0.17	0.85	
						2 & 4	0.13	0.35	

Table 5.28 shows a significant difference (P<.001) in gain score on language development of both rural and urban area children. But, no significant difference was found either at the pre-test stage or at the post-test stage when comparison was made between urban and rural areas.

5.2.0.7.3 **Language development according to schools under different types of management**:

The following table shows a comparison between pre and post-test scores on language development of children attending institutions under different management.

Table 5.29.

Table showing comparative mean score on pre and post-test on language development of children according to schools under different types of management.

Types of management	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	p
		M	SD	M	SD				
Government	75	(1)9.23	2.35	(2)12.09	2.17	1 & 2	2.86	7.73	.001
Private	46	(3)9.11	3.03	(4)12.43	2.75	3 & 4	3.31	5.52	.001
Anganwadis	100	(5)9.27	3.98	(6)11.93	2.32	5 & 6	2.71	5.89	.001
						2 & 4	0.34	0.71	
						4 & 6	0.45	0.96	
						2 & 6	0.11	0.32	
						1 & 3	0.12	0.23	
						3 & 5	0.16	0.27	
						1 & 5	0.04	0.08	

Table 5.29 shows a significant difference in gain scores among government, private and Anganwadis when children attending them were compared on language development. The table also show that, though private schools scored lower at pre-test stage it showed, a higher mean value than the government and Anganwadis at post-test stage. There was however, no significant difference were found when they were compared between one another.

5.2.0.7.4 **Language development according to socio-economic status of the children**:

The following table shows a comparison among the same class and also, between different classes of their language test scores.

Table 5.30.

Table showing comparative mean scores on language development of children according to socio-economic status.

SES	N	Pre-test scores		Post-test scores		Groups compared	Mean difference	t	p
		M	SD	M	SD				
High	39	(1)9.82	3.42	(2)13.08	2.52	1 & 2	3.26	4.79	.001
Middle	120	(3)9.55	3.48	(4)12.21	2.65	1& 4	2.66	6.65	.001
Low	62	(5)8.05	3.14	(6)11.09	2.81	5 & 6	3.04	5.63	.001
						1 & 3	0.27	0.43	
						3 & 5	1.5	2.21	.05
						1 & 5	1.77	2.60	.02
						2 & 4	0.87	1.85	
						4 & 6	1.12	2.60	.02
						2 & 6	1.99	3.69	.001

The above table 5.30 shows, significant difference (P<.001) in the gain score among each of the three classes - High, middle and low S.E.S. When a comparison was

made between these three classes of children at pre-test and post-test levels, it was found that significant differences existed between high and low class SES and also between middle and low SES, with low SES showing a lower score than children from high and middle SES groups.

5.2.0.8.0 **Numerical development**:

The following table shows the overall numerical scores of all children at pre and post-test levels.

Table 5.31.

Table showing comparative mean score pre and post-test on language development of pre-school children.

Area Analysed	n	Pre-test scores		Post test scores		Mean Difference	t	p
		M	SD	M	SD			
Total Numerical Development Score	221	3.71	2.01	4.97	1.29	1.26	7.88	.001

The above table 5.31 shows that, there was a significant difference (P<.001) in the gain score between pre and post-test scores on overall numerical development of the total sample.

5.2.0.8.1 **Numerical development according to gender**:

Comparisons between the same gender groups and also between girls and boys were made in terms of their gain scores between pre and post-tests.

Table 5.32.

Table showing the comparative mean score on numerical development of pre-school children according to gender.

Gender of the children	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Girls	*111*	*(1)3.46*	*2.05*	*(2)4.71*	*1.48*	*1 & 2*	*1.25*	*5.21*	*.001*
Boys	110	(3)3.85	2.16	(4)5.24	1.28	3 & 4	1.39	5.79	.001
						1 & 3	0.39	1.39	
						2 & 4	0.53	2.94	.01

Table: 5.32 shows that, there was a significant difference (P< .001) was found in the gain scores on numerical development when boys and girls were compared separately. When comparison was made between groups no significant difference was found at pre-test level but, significant difference was found at post-test level (P<.01) between boys and girls with boys showing a significantly higher mean gain score than girls.

5.2.0.8.2 **Numerical development of children according to location of the school where they studied**:

The following table shows, comparison within the same area schools and also between urban and rural area schools in terms of their pre and post-test levels.

Table 5.33.

Table showing comparative mean scores on pre and post-test on numerical development of children according to the location of the school.

Location of the school	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Urban	101	(1)3.80	2.04	(2)5.01	1.32	1 & 2	1.21	5.04	.001
Rural	120	(3)3.63	1.98	(4)4.94	1.27	3 & 4	1.31	6.24	.001
						1 & 3	0.17	0.63	
						2 & 4	0.07	0.41	

Table 5.33 shows a significant difference, among urban and rural area schools in gain scores on numerical development (P<.001). But, no significant difference were found when they were compared one another at the pre and post-test levels.

5.2.0.8.3 **Numerical development of children according to schools under different types of management**:

Comparison between pre and post-test scores on numerical development of children attending schools under different types of management and also, between schools under different types of management

Table 5.34.

Table showing comparative mean score on pre and post-test on numerical development of children according to schools under different types of management.

Type of Management	N	Pre-test scores		Post-test scores		Groups compared	Mean difference	T	p
		M	SD	M	SD				
Government	75	(1)3.65	1.60	(2)4.76	0.95	1 & 2	1.11	5.26	.001
Private	46	(3)2.74	1.85	(4)4.89	1.35	3 & 4	2.15	6.32	.001
Anganwadi	100	(5)4.16	2.10	(6)5.17	1.63	5 & 6	1.01	3.74	
						2 & 4	0.13	0.57	
						4 & 6	0.28	1.08	
						2 & 6	0.41	2.05	
						1 & 3	0.91	2.76	.02
						3 & 5	1.42	4.18	.001
						1 & 5	0.51	1.82	

Table 5.34 shows a significant difference among government, private and Anganwadis in their individual gain scores on numerical development. When different types of management were compared, one another no significant difference were found in their post-test scores. However, there was a significantly higher pre-test scores shown by both government schools and Anganwadis as compared to private schools.

5.2.0.8.4 **Numerical development according to socio-economic status of the children:**

The following table shows a comparison among the same class and also between different classes of children in terms of their numerical development.

Table 5.35.

Table showing the comparative mean score on numerical development of children according to socio-economic status.

SES	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	p
		M	SD	M	SD				
High	39	(1)3.85	2.11	(2)5.41	1.43	1 & 2	1.56	3.80	.001
Middle	120	(3)3.83	1.92	(4)4.98	1.37	3 & 4	1.15	5.23	.001
Low	62	(5)3.32	2.81	(6)4.59	1.65	5 & 6	1.27	3.63	
						1 & 3	0.2	0.67	
						3 & 5	0.5	1.52	
						1 & 5	0.53	1.20	
						2 & 4	0.43	1.65	
						4 & 6	0.39	1.63	
						2 & 6	1.82	2.65	.02

The above table 5.35 shows a significant difference (P<.001) in the gain score between pre and post-test score, among each of the three classes - high, middle and low SES. It showed also, a significant difference (P<.02) between high and low SES, when comparison was made at post-test level. It further showed that, at both pre and post-test levels, children from high SES scored higher than the middle and low SES class children.

5.2.0.9.0 **General awareness**:

The following table shows the overall general awareness levels of children covered in the study at pre and post-test levels.

Table: 5.36.

Table showing the comparative mean scores on pre and post-test on general awareness of children attending pre-primary classes.

Area Analysed	n	Pre-test scores		Post test scores		Mean Difference	t	p
		M	SD	M	SD			
General Awareness	221	13.33	3.63	15.56	1.62	2.23	8.26	.001

Table 5.36 shows a significant difference (P<.001) in the gain score, between pre and post-test scores on overall general awareness level of the total sample.

5.2.0.9.1 **Development of general awareness according to gender groups:**

The following table shows a comparison between the same gender groups and also between girls and boys at both pre and post-test levels.

Table 5.37.

Table showing the comparative mean score on development of general awareness of pre-school children according to gender.

Gender of the children	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Girls	111	(1)12.95	3.95	(2)15.23	3.36	1 & 2	2.28	4.65	.001
Boys	110	(3)13.72	3.30	(4)15.89	1.57	3 & 4	2.17	6.2	.001
						1 & 3	0.77	1.57	
						2 & 4	0.66	1.89	

The above table 5.37 shows that, there was a significant difference both among boys and girls in general awareness between their respective pre and post-test scores (P<.001). But, no significant difference was found when a comparison was made between

them. It also, showed that, the mean scores of the boys were higher than of the girls on both pre and post-levels.

5.2.09.2. **Development of general awareness of children according to location of the school where they studied:**

Comparison within the same area schools and also between different area schools were made in terms of pre and post-test level scores and results are shown in the following table.

Table: 5.38.

Table showing the comparative mean scores on pre and post-test on development of general awareness of children according to the location of the schools.

Location of the school	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Urban	101	(1)13.16	4.08	(2)15.37	1.15	1 & 2	2.21	5.26	.001
Rural	120	(3)13.48	3.19	(4)15.73	1.91	3 & 4	2.25	6.62	.001
						1 & 3	0.32	0.64	
						2 & 4	0.36	1.71	

Table 5.38 shows a significant difference (P<.001) in the gain scores on general awareness among both urban and rural area schools. But, no significant difference were found, when they were compared one another both at the pre-test and post-test levels.

5.2.0.9.3 **Development of general awareness according to schools under different types of management:**

The following table shows, comparison between pre and post-test scores within schools under the same type of management and also between types of management on general awareness.

Table 5.39.

Table showing comparative mean scores on pre and post test on general awareness of children according to schools under different types of management.

Types of management	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	P
		M	SD	M	SD				
Government	75	(1)13.75	2.50	(2)15.81	1.81	1 &2	2.06	5.72	.001
Private	46	(3)12.5	2.68	(4)15.76	1.34	3 & 4	3.26	7.41	.001
Anganwadis	100	(5)13.41	4.60	(6)15.38	3.08	5 & 6	1.87	3.4	
						2 & 4	0.05	0.17	
						4 & 6	0.48	1.30	
						2 & 6	0.53	1.43	
						1 & 3	1.25	2.55	.01
						3 & 5	0.91	1.49	
						1 & 5	0.34	0.63	

The above table 5.39 shows that, there was a significant difference in gain scores of children in government, private and Anganwadis on general awareness. When comparison were made between children in different types of management, significant difference were found at the pre-test level between children in government and private schools.

5.2.0.9.4 **Development of general awareness according to socio-economic status of the children:**

Comparison between the same class and also among different classes of children in terms of their general awareness level are shown in the following table.

Table 5.40.

Table showing comparative mean score on general awareness level, according to socio-economic status.

SES	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	p
		M	SD	M	SD				
High	39	(1)3.28	3.59	(2)16.01	0.93	1 & 2	2.73	4.63	.001
Middle	120	(3)13.54	3.83	(4)15.42	2.74	3 & 4	1.88	6.37	.001
Low	62	(5)12.97	3.33	(6)15.44	2.83	5 & 6	2.47	4.49	.001
						1 & 3	0.26	0.39	
						3 & 5	0.57	1.04	
						1 & 5	0.31	0.44	
						2 & 4	0.57	1.97	
						4 & 6	0.02	0.05	
						2 & 6	0.57	1.46	

Table 5.40 shows a significant (P<.001) gain score between pre and post-test scores among each of the high, middle and low SES groups of children. When these three classes were compared one another, no significant difference was found either at pre-test level or at the post-test level. The table also showed that, the mean score of middle SES

were higher than the low and high SES at pre-test level, but at post-test level high SES group of children scored higher than the middle and low SES groups of children.

Section III.

5.3.0. **Social and emotional development:**

To study the influence of pre-primary education on social and emotional development of the children receiving such education, information was gathered with the help of the checklist described in Chapter III. The respective teachers of children were requested to rate children on the checklist items based on their observation of the children. Ratings were obtained soon after children were admitted in their classes and again after a period of at least 6 months. This method was expected to provide details of social and emotional behaviour indicators of children before and after their exposure to the pre-school experiences.

After collecting the checklist from the teachers, the raw scores were then transformed into standard scores using the scoring procedure suggested in the checklist manual. For the purpose of the present study the eight factors covered in the list were grouped into two categories to represent social and emotional realms of development.

5.3.0.1 **Social development of children attending pre-primary schools:**

The following table shows, the overall social development of all children covered in the study expressed in terms of mean score and S.D. These test was conducted soon after the children were admitted in schools, hence it may be considered as knowledge prior to any serious pre-school experiences.

Table: 5.41.

Table showing the social development of pre-primary children covered in the study.

Area Analyzed	n	Mean score of Achievement level	
		M	SD
Social Development	386	23.40	4.89

Table 5.41 shows the total mean score on social development obtained for the total sample.

5.3.0.2. **Comparison of social development at pre-test and post-test levels of children attending pre-primary schools:**

A sample of 221 children were available for pre and post-test, who formed the actual sample for this part of analysis.

Table: 5.42.

Table showing comparative mean score on pre and post-test on social development of children attending pre-primary classes.

Area Analysed	n	Pre-test scores		Post test scores		Mean Difference	t	p
		M	SD	M	SD			
Total Social Development score	221	22.45	4.02	24.21	4.50	1.76	4.29	.001

The above table 5.42 shows, that there was a significant difference (P<.001) between the mean scores of the whole sample of children (N=221) at the pre-test and post-test levels, with post-test showing a higher mean score on social development. The pre-school experience thus, contributed to the social development of children.

5.3.0.3. **Social development according gender groups**:

The following table shows comparison between same gender groups in terms of their gain score and also, comparison of girls and boys in their pre-test and post-test scores on social development.

Table: 5.43.

Table showing comparative mean score on social development of pre-school children according to gender.

Gender of the children	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Girls	111	(1)22.60	3.95	(2)24.29	4.47	1 & 2	1.69	2.96	.01
Boys	110	(3)22.29	4.03	(4)24.14	4.39	3 & 4	1.85	3.24	.001
						1 & 3	0.31	0.57	
						2 & 4	0.15	0.25	

The above table 5.43 shows, a significant difference on social development score when girls and boys were separately compared on their pre and post-test score. The mean scores of girls showing a higher value than of the boys at both pre and post-test stages. When boys were compared with girls, no significant difference was found either at the pre-test stage or at the post-test stage.

5.3.0.4. **Social development of children according to location of the school where they studied:**

Comparison was made on social development between pre and post-test scores among the same area school children and also, between urban and rural area school children.

Table 5.44.

Table showing comparative mean score on pre and post-test on social development of children according to location of school.

Location of the school	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Urban	101	(1)22.21	3.33	(2)23.21	3.66	1 & 2	1	1.75	
Rural	120	(3)22.65	4.38	(4)25.06	4.97	3 & 4	2.41	3.95	.001
						1 & 3	0.44	0.85	
						2 & 4	1.85	3.19	.01

The table 5.44 shows, significant difference ($P<.001$) was found in the gain scores on social development of rural area children. When comparison was made between urban and rural areas, significant difference ($P<.01$) was found between the groups only at the post-test level indicating that the gain of rural area children was significantly higher than their urban counterparts.

5.3.0.5.1. **Social development of children according to schools under different types of management**:

The following table shows, comparisons between pre and post-test of the three types of schools and also, between schools under different types of management.

Table: 5.45.

Table showing comparative mean scores on pre and post-test on social development of children according to schools under different types of management.

Types of management	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	p
		M	SD	M	SD				
Government	75	(1)20.48	2.79	(2)23.08	5.17	1 & 2	2.6	3.82	.001
Private	46	(3)25.74	4.42	(4)25.83	5.61	3 & 4	0.09	0.11	
Anganwadis	100	(5)22.41	3.73	(6)24.34	4.22	5 & 6	1.93	4.37	.001
						2 & 4	2.75	4.58	.001
						4 & 6	1.49	7.84	.001
						2 & 6	1.26	2	.05
						1 & 3	5.26	7.31	.001
						3 & 5	3.33	4.44	.001
						1 & 5	1.93	2.80	.01

Table 5.45 shows, significant difference in the gain scores obtained by children in government and Anganwadis schools between pre and post-test levels. ($P<.001$). There was also, significant difference between government and private school, private and Anganwadis institutions both at pre-test and post-test levels. Private schools showed higher mean scores in both comparisons. Significant difference was also found, between government and Anganwadis at both pre-test and post-test levels with Anganwadis showing a higher mean score value.

The results showed that, the mean scores on social development of private schools did not show any gain as a result of exposure to the pre-school programme.

5.3.0.6. **Social development according to socio-economic status of the children:**

The following table shows, social development to socio-economic status of children, between different SES and also, among same SES.

Table: 5.46.

Table showing comparative mean scores on social development of children according to socio-economic status.

SES	N	Pre-test scores		Post-test scores		Groups compared between	Mean Differen-ce	t	P
		M	SD	M	SD				
High	39	(1)25.10	1.21	(2)25.54	3.07	1 & 2	0.44	0.83	
Middle	120	(3)22.71	3.82	(4)24.67	4.30	3 & 4	1.96	3.77	.001
Low	62	(5)20.27	2.58	(6)22.5	4.50	5 & 6	2.33	3.38	.001
						1 & 3	2.39	5.96	.001
						3 & 5	2.44	5.42	.001
						1 & 5	4.83	14.21	.001
						2 & 4	0.87	1.28	
						4 & 6	2.17	3.14	.01
						2 & 6	3.04	4.05	.001

The above table 5.46 shows, significant difference (P<.001) in the gain score among middle and lower SES children, but not in the high SES group. When comparison was made between these three classes of children at the pre-test and post-test levels, it

was found that significant difference (P<.001) existed between high and middle group, high and low group and high and low group at pre-test level.

The data also, showed significant difference (P<.01) between middle and low SES and between high and low SES (P<.001) at the post-test level. High SES group of children did not gain as a result of the educational programme.

5.3.0.7. **Emotional development of children attending pre-primary schools:**

The following table shows, the overall emotional development of all children covered in the study expressed in terms of mean score and S.D. These test was conducted soon after the children were admitted in schools, hence it may be considered as knowledge prior to any serious pre-school experiences.

Table: 5.47.

Table showing emotional development of pre-primary children covered in the sample.

Area Analysed	N	Mean score of emotional development	
		M	SD
Emotional development	386	23.89	2.68

Table 5.47 shows the total mean score on emotional development obtained for the total sample of 386 children.

5.3.0.8. **Comparison of emotional development at pre-test and post-test levels of children attending pre-primary classes:**

A sample of 221 children were available for pre and post-test, who form the actual sample for this part of analysis.

Table: 5.48.

Table showing comparative mean score on pre and post-test on emotional development of children attending pre-primary classes.

Area Analysed	n	Pre-test scores		Post test scores		Mean Difference	t	p
		M	SD	M	SD			
Total emotional development score	221	23.37	2.49	24.93	3.07	1.56	5.78	.001

Table 5.48 shows that, there was a significant difference (P<.001) between the mean scores of the whole sample of children (N=221) at the pre-test and post-test levels, indicating a significant gain.

5.3.0.9. **Emotional development according to gender groups:**

The following table shows, comparison between same gender group in terms of their gain score and also, comparison of girls and boys in their pre-test and post-test scores on emotional development.

Table: 5.49.

Table showing comparative mean score on emotional development of pre-school children according to gender.

Gender of the children	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Girls	111	(1)23.90	2.47	(2)24.65	2.81	1 & 2	1.46	4.17	.001
Boys	110	(3)23.55	2.49	(4)25.21	3.06	3 & 4	1.66	4.37	.001
						1 & 3	0.36	1.09	
						2 & 4	0.56	1.70	

Table 5.49 shows, significant difference (P<.001) when girls and boys were compared separately in terms of their pre and post-test scores on emotional development. The mean scores of boys showing a higher value than of the girls both at pre and post-test stage. However, when boys and girls were compared, no significant difference were found either at the pre-test stage or at the post-test stage.

5.3.10. Emotional development of children according to location of the school where they studied:

Comparison on emotional development was made between pre and post-test of children from both, rural and urban areas and also, between urban and rural area children.

Table 5.50.

Table showing comparative mean scores on pre and post-test on emotional development of children according to location of school.

Location of the school	N	Pre-test scores		Post-test scores		Groups compared between	Mean difference	t	p
		M	SD	M	SD				
Urban	101	(1)23.02	2.31	(2)24.30	2.22	1 & 2	1.28	4	.001
Rural	120	(3)23.66	2.60	(4)25.46	3.28	3 & 4	1.8	4.74	.001
						1 & 3	0.64	1.94	
						2 & 4	1.16	3.14	.01

Table 5.50 shows, a significant gain on emotional development (P<.001) by children in both rural and urban areas. When a comparison between urban and rural area children, significant difference (P<.01) was found at post-test level, but found no significant difference at pre-test level. The gain was more in case of rural area school children.

5.3.11. **Emotional development of children according to schools under different types of management**:

The following table shows, a comparison between pre and post-test scores of children attending schools under different types of management and also, a comparison between schools under different types of management.

Table 5.51.

Table showing comparative mean scores on pre and post-test on emotional development according to schools under different types of management.

Types of management	N	Pre-test scores		Post-test scores		Groups compared between	Mean Difference	t	p
		M	SD	M	SD				
Government	75	(1)22.51	1.81	(2)24.00	3.12	1 & 2	1.49	3.45	.001
Private	46	(3)24.4	2.1	(4)25.87	1.85	3 & 4	1.33	3.24	.01
Anganwadis	100	(5)23.50	2.73	(6)25.19	3.06	5 & 6	1.69	4.12	.001
						1 & 3	2.03	5.34	.001
						3 & 5	1.04	2.34	.02
						1 & 5	0.99	2.83	.01
						2 & 4	1.87	4.16	.001
						4 & 6	0.68	1.66	
						2 & 6	1.19	2.53	.02

Table 5.51 shows, a significant difference (P<.001) in the gain scores on emotional development obtained by children in government, private and Anganwadis. The mean scores of the children attending private schools showed a highest mean value than both the government and Anganwadis at both pre-test and post-test levels.

The data also showed, significant difference at pre-test level between government and private schools (P<.001), private and Anganwadis (P<.02) and also between government and Anganwadis (P<.01). Significant difference was also, found at post level between government and private schools (P<.01) and also between government and Anganwadis (P< 02).

5.3.12. **Emotional development according to socio-economic status of the children:**

The following table shows, emotional development in relation to socio-economic status of the children, between children from different SES classes and also, among same SES classes at pre and post-test level performances.

Table: 5.52.

Table showing comparative mean scores on emotional development of children according to the socio-economic status.

SES	N	Pre-test scores		Post-test scores		Groups compared	Mean difference	t	p
		M	SD	M	SD				
High	39	(1)24.82	2.18	(2)25.87	2.40	1 & 2	1.05	2.02	.05
Middle	120	(3)23.53	2.21	(4)25.18	2.84	1& 4	1.65	5	.001
Low	62	(5)22.15	1.91	(6)23.79	2.89	5 & 6	1.64	3.73	.001
						1 & 3	1.29	3.23	.001
						3 & 5	1.38	4.31	.001
						1 & 5	2.67	6.36	.001
						2 & 4	0.69	1.5	
						4 & 6	1.39	3.09	.01
						2 & 6	2.08	3.92	.001

Table 5.52 shows, significant difference ($P<.05$) in gain score on the overall emotional development among high SES, middle SES and low SES children. The mean scores of high SES showed a higher values, than the other two groups at both the pre and post-test levels.

When a comparison was made at pre-test level, between the three SES classes significant difference were found between high and middle SES, middle and low SES ($P<.001$) and also between high and low SES ($P<.001$) children. At post-test level however, significant difference was found ($P<.01$) between middle and low SES and between high and low SES ($P<.001$) children only. There was no significant difference between high and middle SES groups of children.

CHAPTER VI
DISCUSSION OF FINDINGS

This chapter attempts to discuss the findings with regard to possible influence of pre-school educational programmes on cognitive, social and emotional development of children in Dimapur, Nagaland. There is a general assumption that attendance at a nursery school or kindergarten or exposure to same similar planned pre-school programme would influence positively a child's cognitive ability, emotional behaviour and socially desirable behaviour, and would also help in preparing the child for formal education in subsequent years at school.

The early childhood years represent the best period for the child's physical, emotional, social and intellectual development, when the child is without any inhibition and external control. It is also a period that paves the way for effective learning from schooling.

Early childhood education is a form of social intervention that helps in meeting the social and physiological needs of parents and children since it provides for looking after the children of working mothers in suitable environments normally not available to children from urban areas, whose small flats or tenements are hardly appropriate for their proper growth. These schools also, attempt to compensate for children, especially from unsatisfactory home environments, from slum areas or poor families. Moreover, modern researches have shown that the years between 3 and 10 are of great importance in the child's physical, motor, social, emotional, language, intellectual and aesthetic development. Evidences also show that children who have been to a pre-primary school, progress better at primary stage, show higher achievement in cognitive work as well as in social and emotional adjustments, as compared to those who have had no pre-school education.

The present study showed significant gain score between pre- and post- stages on overall cognitive, social and emotional domains of development for the total sample of children covered in the study. This shows that, children receiving pre-school experiences showed gains in their overall development and particularly in respect of these three dimensions in the cognitive, social and emotional domains. These findings are similar to the conclusions drawn by Umrajvala (1977), Saint (1980) on the effects of pre-school education in educational growth, scholastic achievement, reading readiness, cognitive skills and social maturity. The study also showed that, children attending pre-schools have shown positive gains in their cognitive development inferred from their achievement levels in language skills, numerical skills and general knowledge. The study seems to support the conclusions drawn earlier by Wellman (1932); Skeels, Updegraff, Wellman and Williams (1932); Karnes, Teska and Hodigans (1969); Woolley (1925); Strakweather and Rober (1940) that a positive gain in mean I.Q. is found in children attending nursery school. These results, however, are contrary to the findings of Olsen and Hughes (1940), Goodenough and Maurer (1940), who reported that the increased I.Q. scores could have resulted from an exposure to a variety of non-intellective factors. Another study conducted by Jenks and associates (1972) also reported that gains in I.Q. resulting from pre-school experiences are temporary.

On social development, the result showed significant difference between the pre-test and post-test scores of the whole sample, with post-test stage showing a higher mean score. This implied that pre-school experiences contributed to the development of social attitudes, co-operative behaviour and also helped to learn to conform, to be assertive without being aggressive, to show independence, to be affectionate and also other

socially acceptable roles. This finding seems to support the conclusion of Clarke-Stewart and Feina (1983), that children receiving day care or attending nursery schools were more co-operative and more assertive with peers, more co-operative and also competent with adults, than children being raised exclusively at home. It also supports the line of Walsh (1931) who observed that nursery school children become more confident, more spontaneous, less inhibited, more independent, more self-reliant, and more interested in their environments than comparable pre-schoolers who did not attend nursery schools.

On emotional development also, the present study showed positive effects resulting from exposure to pre-school programme shown by the level of emotional maturity of such children. This indicates that the children had developed qualities like affective stability, self-reliance, unselfishness, not being jealous, and cooperative and responsible behaviours after attending pre-schools. This finding of the study seems to support the conclusions of an earlier study conducted under the Perry Pre School Project (1962), (Berrueta – Clement *et al.* 1984) which indicated that children who participated in pre-school programme received better ratings by elementary school teachers in academic, emotional and social development than control group children.

Gender bias in education is quite evident in many social groups in our country. Girls are not provided equal opportunity along with boys to get education at all levels. Boys enjoy special privileges than girls. However, in most tribal societies, a girl child is treated not as a burden, and receives similar treatment like boys. Some of the tribes follow the matrilineal system and show even preference in matters of education of children. The present study showed that both girls and boys gained significantly in terms of their pre- and post-test scores on all the three domains of development – cognitive,

social and emotional. The study found that, irrespective of gender of the children, an exposure to pre-school programme bestowed benefits to both categories of children. The present is similar to the conclusion of Muralidharan and Banerji (1974) who reported that children I pre-school do consistently in all aspects of language development and have a much higher score in intellectual development. In the realm of cognitive development, inferred by the achievement levels in language, numerical and general knowledge, significant gains were shown by both the gender groups. This was true even in terms of the total achievement level as well as their achievement levels in each of the three component areas of achievement.

The result indicated further that, girls benefited more as a result of exposure to pre-school experiences in terms of social attitudes like being co-operative, pleasant, friendly, original, talkative etc. This result appears to be similar to the findings of Saran (1970) who found that girls have a better social adjustment than boys. On the other hand, boys showed higher mean scores on both emotional and cognitive development. This indicates that boys seem to gain more in gaining emotional control and also in academic achievement. The boys also seem to enter pre-school class with a wider range of knowledge and with more emotional maturity, and that they seem to retain the advantage even after going through the pre-school experiences. These findings may even suggest that boys continue to benefit from their traditional favoured position, as the present study was conducted in a patriarchal and a mixed society where, children came from various social backgrounds. There are hunches which have to be confirmed in future researches.

It is generally noted that opportunities for development are not equal in urban and rural areas. Most of the developments usually take place in urban areas, and the rural

areas are deprived of such developments. Even in educational development, most of the educational institutions are located in urban areas and are inaccessible to a majority of the rural children. Schools which exist in rural areas are inadequate, unhygienic and unsuitable for children's growth and learning. However, in the present study a comparison of children attending schools in rural and urban areas showed that children in rural areas gained significantly as a result of pre-school exposure on social development, than their urban counterparts. However, both urban and rural areas, gained significantly in their pre- and post-test levels on emotional and cognitive development. The results further indicated that, on all dimensions children from rural areas showed a higher mean score than their urban counterparts. This shows that children in rural areas having access to pre-school facilities, activities and programmes, gain more significantly and benefit more by exposure to such experiences. When comparison on individual achievement levels – language, numerical and general knowledge was made, children in rural areas continued to show significant gain on general knowledge than their urban counterparts. However, on numerical and language skills, children in urban areas showed significant gains than their rural counterparts. The present findings support the earlier finding by Bevli (1974), who found that urban children showed earlier and better language development than rural and industrial children. The study implies that, children in the urban areas had more opportunity in enhancing their language and numerical skills by participating in various pre-school experiences and activities.

Early childhood education is provided in Dimapur by various organizations – Government, private and voluntary bodies. However, there is a great variation in the standard and emphasis on different aspects of their programmes and activities ranging

from a high qualitative education to a very low quality. Lulla *et al* (1966) reported that adverse school conditions, poor school administration, poor quality of teachers, unplanned curriculum, and inadequate equipment hindered pupil's performance and school progress. The present findings however, contradicts the conclusion and found that children attending schools under different types of management – Government, private and Anganwadis gained significantly in terms of their pre- and post-test level performance in emotional and cognitive domain behaviours. Further, it showed that children attending private schools made greater gains, perhaps as a result of the quality of educational programmes, environment and facilities provided in such schools. This finding seems to be similar to the conclusion drawn by an earlier study of Walker (1967), who found that, in comparison with traditional schools, high creative schools have psychological environments leading to high aspiration, high intellectual climate and high academic achievement. On social development, no significant difference in gain score was found among children in private schools, but children in Government and Anganwadis gained significantly after going through pre-school experiences. The study also revealed that, though private schools showed no significant difference in terms of their pre- and post-test levels, their mean scores were higher than Government and Anganwadis both at pre- and post- test levels. This may be due to the fact that, children in private schools acquired more social attributes before receiving any formal schooling and they developed further as a result of pre-school experiences.

In the cognitive domain, on scores obtained in the language, numerical and general knowledge components, children in pre-schools under all types of management showed a significant difference in the gain score after going through school programme.

This finding is true with regard to the total achievement score of children. However, in the language component, children in private schools showed a higher mean score than children in Government and Anganwadi institutions; in the numerical part, children in Anganwadis showed a higher mean score, and in general knowledge children in Government schools showed a higher mean score. The result suggests that, in private schools more emphasis is given on language, learning through oral and written exercises. The Anganwadis through their non-formal method of education seem to help children to learn numerical work rather faster and more effectively. Government schools with full fledged school setting seem to help the pre schools in acquiring awareness of their surroundings. Further researches may look for factors that characterize schools under different management. This may help to pinpoint determinants of performance behaviour of pre-school children attending them.

The socio-economic status of children is a factor known to be affecting achievement in schools directly or indirectly in schools. A comparison was made of children attending pre-primary schools with regard to their social, emotional and cognitive development after grouping them into high, middle and low SES groups. The result of the present study showed a significant gain score between pre- and post-test stages on overall achievement and also on social and emotional development of children from high, middle and low SES background. This shows that, pre-school experiences has had a demonstrable affect on these variables irrespective of their SES background. An earlier study conducted by Muralidharan and Kaur (1987) showed similar results that no matter how disadvantaged the children were, well planned early childhood education strategies did make an impact and faster development of children. It also supported the

finding of Stephans (1958) who reported that economic factors have very little to do with the performance of the child in the school. However, the result of the present study is contradictory to the findings of Whiteman and Deutsche (1968) that children from poorer environments, have lower self-esteem, and children with low self-esteem do less well in school. Rosen's (1956) findings on achievement motivation also seem to contradict the finding. However, on social development significantly greater gain was found in the present study among middle and low SES groups. No significant difference was found among high SES groups after attending pre-school programme. However, the mean score of the high SES group was higher than the middle and low SES groups at both the pre- and post stages. This may be due to the fact that, children from high SES background have had a wider and favourable environment for social development than the middle and low SES groups. But, more significant gains were shown by children of middle and low SES, as a result of pre-school experience.

A comparison of achievement levels on language, numerical and general knowledge of children in the three SES groups also showed significant gain scores among each of the three classes of children, indicating a positive influence of pre-school experience on such learning of children irrespective of their SES background. The result contradicts the findings of Hill and Giammates (1963) that children from middle class families were ahead in vocabulary, reading comprehension, arithmetic skills and ahead I problem solving. However, the results showed that the mean score of high SES was higher than the middle and low SES on all three dimensions of achievement, language, numerical and general knowledge. These findings support the study by Golden and co-workers (1973) who reported that children from the highest social class group scored

higher on I.Q. tests than children from the lowest social class group, and that disparity existed for all types of tasks. Earlier studies by Mathur and Hundal (1972) on relationship between achievement and socio-economic background found a direct influence on achievement of the child. Siddique *et al* (1983) also found socio-economic conditions of the family affecting academic performance.

Thus, the findings of the present study revealed that, educational facilities and programmes, at the pre-primary stage have a positive influence on the achievement levels as well as on the social and emotional development of the children. The benefit is more for children from the middle and lower strata of society. Pre-school education, if planned well and executed effectively may act as a leveler of differences existing prior to school entry of children. The desirability of introducing an efficient system of pre-primary education as part of universal compulsory education for all children is indicated by the findings of the present study.

CHAPTER VII
SUMMARY OF FINDINGS AND CONCLUSIONS

7.0 Introduction:

The present study made an attempt to trace briefly, the trends in development of pre-primary education in Dimapur, and also to analyze the educational programmes offered, and to study the influence of such programmes on the cognitive, social and emotional development of children. In the first chapter of this report, the background of the study, which include a description of the study in terms of needs and importance, objectives, scope and delimitation have been presented. The second chapter reviewed research literature related to the study. In the third chapter, the method and procedure adopted for the study have been described. In the fourth chapter, the analysis and interpretation of data collected through a questionnaire filled in by Heads of Institutions, the scores obtained from a sample of children on a test to assess simple proficiency in language, number skills and general knowledge as well as the rating obtained from a sample of teachers on the "Children – Behaviour" checklist (adaptation) by Leland H. Stott (1978), along with the data on socio-economic status scale – Kuppuwamy.B (1962) (Revised edition 1981) with adaptation made by the investigator.

The present chapter deals with the summary of the findings.

The pre-school years are considered as the most important and highly impressionable stage in life. It is during this period that virtually irreversible changes are nurtured in the child's life. The early years are the base upon which the future foundation is grounded. The impressions that are made on the child's mind during this period lasts throughout his life. The International Commission on Education (1972) has therefore, rightly emphasized that education of preschool children is an essential pre-condition to any educational and cultural policy of a nation.

The significance of pre-school education is now being recognized all over the world. It is in early childhood that, solid foundations for physical, mental, moral and social development that take place in early childhood is crucial for subsequent development, and that services provided in early childhood are very important for the development of the child. The Education Commission (1964 – 1966) stressed the need and importance of pre-school education stating thus "Pre-primary education is of great significance to the physical, emotional and intellectual development of children, especially those with unsatisfactory home backgrounds".

Education of a child generally begins at and early stage. Home is viewed as the proper context of learning, the parents as proper teachers and the earliest stage of childhood as the period for beginning education. It is the family that provides the immediate pattern of physical, social and emotional support and stimulation. Many homes, however, are not always able to provide the best conditions and experiences for the development of education. Early childhood education therefore is a part of the child rearing experience provided naturally for all children. Mac Donald (1969) has correctly indicated early childhood as a form of deliberate social intervention.

The present study deals with the analysis of the educational programmes at the pre-primary stage and their influence on cognitive, social and emotional development of children in Dimapur, Nagaland.

The need for the present study was felt because, till now, in Nagaland, no evaluative research study has been done. Besides, there is a feeling that the education programmes offered in many of the existing pre-primary classes are not organized on scientific lines due to various reasons. So, the present study attempted to trace the

development of pre-primary education in Nagaland in general, and also to investigate such educational programmes and their influence on cognitive, social and emotional development of children specifically in Dimapur, Nagaland.

The objectives chosen for the study were the following:

(i) To study the pattern of development of pre-primary education in Dimapur, in a historical perspective.

(ii) To study the facilities and programmes of educational experience provided in the pre-primary schools functioning in Dimapur, Nagaland.

(iii) To study the influence of pre-primary education on the cognitive,social and emotional development of children in dimapur, Nagaland.

7.1 Method and Procedure:

The method used in the study was a combination of descriptive and experimental methods of research. Primary and secondary sources were used in preparing the write-up on the development of pre-primary schools in Dimapur in a historical perspective.

The data pertaining to the development, plans and programmes and also the infra-structural facilities available in the selected sample of pre-primary schools in Dimpur, Nagaland was collected through a questionnaire prepared by the investigator. The data pertaining to the influence of educational programmes on cognitive, social and emotional development was collected through –

(i) A test to assess simple proficiency in language, numerical skills, and general knowledge prepared by the investigator.

(ii) The Children – Behaviour Checklist (adaptation) by Leland H. Stott, 1978.

(iii) Socio-economic status scale – Kuppuswamy. B (1962) (Revised edition, 1981) with adaptation made by the investigator.

In order to collect detailed information regarding the working of pre-primary schools in Dimapur, a sample of 80 schools (25.56% from the total schools i.e., 313) representing all types of schools under different types of management, and located in rural and urban areas was selected randomly. Only 65 (i.e., 20.76% of the total schools numbering 313) heads of the selected schools returned the filled questionnaires. Thus, the effective sample used in this part of the study was 65. A representative sub-sample of43 schools, forming 13.74% of the total schools in Dimapur, was randomly selected from the main sample of 65 schools to conduct the study on performance indicators. Influence of education on the three dependent variables was studied by using a single group, pre-test – post-test design. These 43 schools included 18 private schools, 19 Government schools and 6 Anganwadi Centres. A sample of 221 children was taken for the study by selecting 6 to 8 children per school depending on the size of the class.

The tools used for the present study included:

Questionnaire for the Head of Institution:

The questionnaire was prepared by the investigator to study the development, history plans and programmes being made and implemented, and the infrastructural facilities available in the selected samples of pre-primary schools. The questionnaire elicited details of information relating to various aspects of pre-schools such as year of establishment, management pattern, goals of pre-primary school, details of students and teachers, school organisation, method of instruction, and teaching – learning aids made available, infrastructure and other facilities provided, finance etc.

Test of proficiency for the children:

A test to assess simple proficiency in language skills, numerical skills and general knowledge was prepared by the investigator. The component on language consisted of 16 items, on number skills 7 and on general knowledge 17 items.

Children's – Behaviour Checklist by Leland H. Stott (1978):

It consisted of 166 items grouped into 8 factors. For the present study, these factors were categorised into 2 groups as indicators of social and emotional aspects. Under social aspects were included factors A, D, E and H. Under emotional aspects were included factors B, C, F and G.

Socio-economic status scale developed by Kuppuswamy. B (1962) (revised edition 1981):

This was adopted for measuring the SES of the children. Th scale consisted of 3 aspects – education, occupation and income. The educational and occupational scores were retained as in the scale but only the income limits of the original scale were modified taking into account the pay structure implemented in the state of Nagaland following the recommendation of the 3rd pay commission. Thus, the modified socio-economic status scale was adopted for the present study.

In the present study, historical – cum descriptive method was used to explain trends in development of pre-school in Nagaland. Analysis of the data on pre- and post-tests and gains in achievement and changes in social and emotional development aspects was made using inferential statistics. Information regarding the institutional facilities and programmes was analysed qualitatively, and in certain cases, percentages were used to express the results. Appropriate inferential statistical tests were employed to test if the

existing pre-primary programmes influenced the growth parameters of children significantly.

7.2. Findings on the educational facilities and programmes provided and their influence on cognitive, social and emotional development are presented in sections I and II respectively.

7.2.1 Section I. Development and status of pre-primary education in Dimapur:

The main findings are as follows:

(1) The present study revealed that prior to the coming of the christian missionaries, there was no formal education in Nagaland. Knowledge was imparted through indigenous institutions called "morungs", using mostly informal and non-formal methods.

(2) The introduction of formal education among the Nagas started after the American Baptist missionaries set up the first formal school in the Naga Hills in 1878. Similar institutions were set up subsequently, and all of them were primary schools in the beginning, but were, in course of time, upgraded to high school and tertiary level institutions.

(3) The first kindergarten class was opened in the Kohima school in 1926, but more similar institutions were opened only after Nagaland attained statehood in 1963, with a spurt of such schools appearing in Dimapur after 1980.

(4) The study found that, private and government schools were either registered with, or recognised by the Director of School Education, Nagaland, and the Anganwadis functioned under the Integrated Child Development Services run by the State Social Security and Welfare Department. Most of the schools are

attached either to a primary, middle or a high school. English is used as the medium of instruction in almost all the schools.

(5) The pre-primary education programme in Nagaland is now under the control of one of the four agencies, namely the State Social security and welfare department, State Department of School Education, local authorities and voluntary agencies and individuals.

(6) Most of the schools studied used traditional lecture method. It was also found that, no school gave importance to play activities in any serious manner.

(7) The study revealed that, out of 232 teachers working in the sample of schools covered, only 18 teachers had undergone special training in pre-school education. Further, out of 65 Heads of Institutions, only 6 had undergone special training in Pre-school education.

(8) Regarding infra-structure facilities available in the sample of schools, it was found that most had buildings, classrooms, furniture and play/games materials. However, only 17 schools had library facilities and only a few students used it regularly.

(9) All the private institutions depended on the admission fees and monthly fees collected from the students to meet their expenditure. The study also revealed that, none of the private schools received grants from the Government. The fees collected showed variations from school to school.

(10) Regarding the outcome from activities and programmes offered in the schools, most of them reported that they helped in providing a sound foundation for the proper mental, emotional and social development of the

children.

(11) In running the schools, the common problems faced included poor response from the parents, lack of funds and play materials. It was realised by most that, providing play materials, teaching aids and materials for toning up the quality of work in the schools was necessary.

7.2.2 Section II. Influence of pre-primary education on development of children.

The main findings are the following:

COGNITIVE DEVELOPMENT (inferred from achievement levels in language, numerical skills and general knowledge):

(1) The results of the present study showed significant differences in the gain score on overall achievement level of the total sample (N=221). The mean score on post test scores showed a higher mean value, signifying real gain after exposure to a pre-school programme.

(2) Both girls and boys gained significantly, when they were separately compared on their pre-and post-test scores. Boys showed a higher mean value both at pre-and post-test stages than the girls. But, when girls were compared with boys separately at pre and post levels, a significant difference was found only at the post-test level. The gain was significantly more in the boys.

(3) The study also showed that, children from both urban and rural areas gained significantly in their levels of achievement between pre-and post- test levels. Children in rural areas scored higher than the children of urban areas. But, when comparison was made between rural and urban areas separately at pre- and post- test level, no significant difference was found either at pre-or post-test stage.

(4) The findings showed that, children in government, private and Anganwadis gained significantly after undergoing pre-school education programme. When children in different types of management were compared to one another in terms of their pre-and post-test scores, no significant difference was found, either at pre-test or post-test levels.

(5) Children's socio-economic status has also been known to be one of the significant factors influencing children's achievement levels. The present study showed that, children from all the three SES levels- high, middle and low, gained significantly on achievement levels at the post-test stage. When comparison was made among these three classes of children at pre-test and post-test levels, it was found that significant difference was there between middle and low SES at post-test level. The findings revealed that, in both pre-and post-test levels, children from the low SES scored lower than children from middle and high SES.

A secondary level comparison was made to see if gains made in the component areas of achievement namely- language, numerical and general knowledge also showed any significant differences.

Achievement in language:

1). There was a significant difference in the gain score between pre-and post-test levels on overall achievement in language of the total sample of children, indicating beneficial influence of pre-school educational programme on language learning.

2). Both boys and girls, gained significantly in their levels of achievement in language between pre- and post-test levels, after undergoing pre-school programme. When a comparison was made between boys and girls at pre-and

post-test level, a significant difference was found only at post-test level, indicating significantly greater gain by boys.

3). Children from urban and rural areas gained significantly in language between pre- and post-test levels, indicating gains as a result of exposure to pre-school programme. But, when comparison was made between rural and urban areas separately at pre-and post-test levels, no significant difference was found either at pre-or post-test stage.

4). Children in government, private and Anganwadis, gained significantly in their levels of achievement on language, after undergoing pre-school programme. The study also showed that, though children in private schools scored lower at pre-test stage, they showed a gain in their scores at post-stage after an exposure to pre-school educational programme. However, there was no significant difference when the groups were compared with one another.

5). Children from all SES backgrounds-high, middle and low SES showed, significant difference in the gain score indicating positive gains as a result of pre-school experiences. When a comparison was made among these three classes of children separately at the pre-and post-test levels, it was found that significant differences existed between high and low SES and also between middle and low SES, with low SES showing a lower score than children from high and middle SES groups in both the testing. This shows that pre-school experiences had a more beneficial gain on children from middle and high SES.

Achievement in numerical:

1). The findings revealed, significant difference in the gain score between pre- and post test scores on overall achievement in numerical of the total sample, after an exposure to pre-school programme.

2). The study also indicated that, both girls and boys gained significantly in their levels of achievements in numerical, between pre- and post-test levels, after undergoing a pre-school programme. When comparison was made, between girls and boys separately on their pre- and post-test levels, significant difference was found only at post-test level, indicating real gains in numerical after undergoing pre-school education programme, with boys showing significantly more gains from pre-school experiences.

3). Children both in rural and urban areas gained significantly in their levels of achievement on numerical between pre- and post-test levels, with urban areas showing a higher mean value than their rural counterparts. When urban and rural areas were separately compared in their pre- and post-test levels, no significant difference was found either at pre- test or post-test level.

4). Significant gain scores were obtained by children in government, private and Anganwadis, after undergoing a pre-school programme. When different types of management's were compared with one another, significant difference was found between Government and private schools and also between private and Anganwadis, at pre-test stage. But, no significant difference was found between them, at post-test stage.

5). The findings also showed, significant difference in the gain score between pre- and post-test score, among each of these three classes- high, middle and low SES, indicating positive gains irrespective of their classes, as a result of pre-school experiences. When comparison was made, between these three classes of children separately, at their pre- and post-test level, significant difference was found between high and low SES only at post-test level. It also showed that, both at pre- and post-test levels, high SES group of children scored higher than their other SES counterparts, indicating the influence of SES on the achievement levels in numerical.

General knowledge:

1). The study revealed that, there was a significant difference in gain score between pre- and post-test score, signifying positive effects as a result of pre-school experience on their achievement level in general knowledge among the total sample of children covered in the study.

2). The study also indicated that, both boys and girls gained significantly in their level of achievement in general knowledge, between pre- and post-test level, as a result of pre-school educational programme. When comparison was made between boys and girls separately on their pre- and post-test level, no significant difference was found either at pre- test or post-test stages. The mean score of boys showed a higher mean value than that of the girls, indicating that boys had a wider knowledge of the general surroundings even before exposure to the educational programme and they retained it even later.

3). Children, both in urban and rural areas gained significantly in general knowledge, between pre- and post-test level indicating beneficial gains, after undergoing pre-school programmes. When they were compared to one another, both at pre- and post-test level, no significant difference was found on their achievement level in general knowledge.

4). Children gained significantly in Government, private and Anganwadis on general knowledge, after undergoing pre-school educational programme. When comparison was made between children in different types of management, a significant difference was found between Government and private schools at pre-test level; but no significant difference was found, after the children under different types of management, were exposed to pre-school programme.

5). The study showed significant gain score between pre- and post-test score among each of the three SES classes- high, middle and low SES groups of children, indicating positive gains as a result of pre-school experiences. When these three classes were compared with one another no significant difference was found either at pre- or at the post-test levels. The results also showed that the mean score middle SES was higher than that of low and high SES at pre-test level. But, after an exposure to pre-school programme, high SES group of children showed more gain than the middle and low SES groups of children at post-test level.

SOCIAL DEVELOPMENT:

1). The findings indicated that there was significant difference, between the mean scores of the whole sample of children at the pre-test and post-test levels, with

post-test level showing a significantly higher mean score. This shows that pre-school experience thus contributed to social development of children-cooperatives, friendliness, talkativeness, sympathetic and affectionate nature, forgiving and protective attitude and such attributes.

2). The study also showed significant difference among boys and girls in terms of their pre- and post-test scores on social development. The mean scores of girls showing a higher mean value than that of the boys, indicating more gain among girls as a result of pre- school programme. When boys were compared with girls, no significant difference was found either at pre-test stage or at the post-test stage.

3). The present study also found significant difference only among rural areas, when urban and rural children were compared separately in terms of their pre- and post-test scores on social development. This shows that children in rural areas gained significantly as a result of the educational facilities and programmes provided in the pre-school. When comparison was made between urban and rural areas, significant difference was found between the groups only at post-test level, indicating that the gain among the children in rural areas was significantly higher than their urban counterparts.

4). Children in Government schools and Anganwadis gained significantly indicating that the pre-school experiences helped children in developing positive social attitude in them. However, no such significant difference was found in children from private schools. But, significant difference was found when the groups were compared with one another both at pre- and post-test stages. The study showed that on both pre- and post-test stages, children in private schools

showed higher mean scores than children in Government schools and Anganwadis. This shows that children in Government schools and Anganwadis gained significantly after undergoing pre- school experiences.

5). The study showed that significant difference in the gain score was found in middle and low SES groups of children, indicating that children from middle and low SES groups benefited by the educational facilities and programmes at the pre-primary stage in developing a positive social attitude. However, no significant difference was found among high SES group. When comparison was made between these three classes of children, significant difference existed between high, middle and low SES groups at pre-test levels. But, at post-test level, significant differences was found between middle and low SES groups and low and high SES groups. The study also showed that on both pre- and post-test stages, high SES showed a higher mean score than their counterparts. This indicates that middle and low SES groups of children gained significantly, after undergoing pre-school experiences.

EMOTIONAL DEVELOPMENT:

1). The study found significant difference in the gain score of the total sample of children covered in the study, with post-test showing a higher mean score. The finding shows that, pre-school experiences thus, contributed in helping the child to develop abilities to concentrate, to meet situations and to accept success quietly, to show co-operative and responsible behaviour, emphatic tendency, unselfish, not jealous, self-reliant and similar attributes.

2). The study also found significant difference, when boys and girls were compared separately in terms of their pre- and post-test levels on emotional development, with boys showing a higher mean value than the girls. This indicates that, through pre-school experiences, boys showed significantly greater gains on emotional attributes. However, there was no significant difference when boys and girls were compared with one another both at pre- and post-test stages.

3). Children, both in urban and rural areas gained significantly in their levels of emotional development, between pre- and post-test levels indicating beneficial gains in children from rural and urban areas. When comparison was made between urban and rural areas separately in terms of their pre- and post-test scores, significant difference was found only at post-test level. This shows that, children in rural areas benefited significantly more from the pre-school programme and experiences.

4). The present study showed that children gained significantly in Government and private schools and Anganwadis, signifying positive effects of pre-school, programme on emotional maturity of the children. The mean score of the children in private schools was higher than the Government schools and Anganwadis, both at pre- and post-test levels, indicating that children in private schools benefited more by the educational progammes provided in the pre-schools. When comparison was made between children in different types of management, significant difference was found between Government and private schools, private schools and Anganwadis and also between Government schools and Anganwadis at pre-test level. However, significant positive effects were found between

Government and private schools and also between Government schools and Anganwadis at post-test levels, with private schools showing significantly higher mean score than their counter parts.

5). The study also revealed that, there was a significant difference in the gain score among all the three classes-high, middle and low SES children. The mean score of SES showed a higher value than the other two groups both at pre-and post-test levels. This indicates more favorable influence of a high SES status on their emotional development. When comparison was made between these three classes of children, significant differences were found between high and middle SES, middle and low SES and also, between high and low SES children at pre-test levels. However, at post- test levels significant gains were found between middle and low SES, and between high and low SES children, with high SES showing significantly higher mean value than middle and low SES.

7.3. CONCLUSIONS:

Over the years, after Nagaland attained statehood there has been an awareness of pre- primary education, at demand for opening more institutions as shown by the development during the past 35 years. The type of infra-structure provided and quantum of tuition fees collected, for teaching methods employed and the man power employed in different types of institutions are not uniform. The infra-structure provided in the schools varied from high quality to very low quality. The influence of pre-primary education on the development of children has been established in this study. It showed gains in the development of social attitudes and skills, emotional maturity, ability to concentrate, confidence to meet different situations, ability to accept success quietly, co-operative and

responsible behaviour, empathic tendency, unselfishness, self reliance and resourcefulness and affective stability. The children undergoing pre-primary education showed positive gains, even in a single year program of pre-primary education, in terms of their overall academic performance and more specifically in terms of their performance in the language domain, numerical area and also in their level of general awareness.

The present research has shown a properly organized pre-primary education with appropriate infra-structure and right kind of teachers do have a facilitating influence on overall development of children in general and in their preparation for any serious formal education in subsequent years.

7.4 SUGGESTIONS FOR FURTHER RESEARCH:

During the course of the present investigation, the investigator realized some gaps of knowledge which may be filled in by further research for better understanding of pre-school education and also in shaping the programmes of pre-school education. Therefore, the following areas are suggested for further research.

(i) A comparative study of the achievements of the primary school children with or without pre-school experience.

(ii) A detailed study on pre-school level organization in its totality and its relation to performance variables.

(iii) A detail study on school to school variations in term of the types of programme, curriculum and its transaction and also other inputs.

(iv) A comparative study between different states on its educational programmes, types, activities and its influence on pre-school children can be taken.

(v) A study on the role of voluntary organizations for the promotion of pre-school education in Nagaland.

(vi) A critical investigation into the role of Integrated Child Development Services (ICDS) scheme, and its implementation can be undertaken for the study.

(vii) A study on the use of play way method and its influence on the all-round development among pre-school children can be undertaken.

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APPENDIX A

DEPARTMENT OF EDUCATION

NORTH-EASTERN HILL UNIVERSITY

SHILLONG

QUESTIONNAIRE FOR THE HEAD OF INSTITUTION

To,

_____

_____

Sir/ Madam,

I am carrying out a study on pre-primary education and its influence on the cognitive, social and emotional development of children in Dimapur, in fulfillment of the degree of Doctor of Philosophy in Education.

I shall be thankful, if you kindly extend your co-operation by furnishing information regarding your institution and its activities by filling in the enclosed questionnaire. Your response will be treated with utmost confidence and used solely for the purpose of my investigation.

Kindly return the questionnaire duly filled in at your earliest convenience.

Thanking you,

Sd/- Temjennaro Jamir

Researcher

I. Identification, information about the school:

a) Name of the Institution:

_____

_____

b) Year of establishment:_____

c) Location:_____

II. Management Pattern of School: (Please tick the appropriate one)

(a) (i) Government

(ii) Private

(iii) Government Aid

(iv) Board

(v) Any others (specify)

(b) Registered Yes/No

(c) Recognized Yes/No

III. Goals formulated by the schools:

What are the goals of pre-primary education in your school? (Please tick from the following)

(a) To attain emotional maturity

(b) To develop intellectual growth

(c) To develop social attitudes and manners

(d) To develop good health and habits

(e) To develop motor behaviour

(f) To develop precision and fluency in speech and language

(g) Any others (Please specify)

_____

_____

IV. Structure of Pre-primary schools: (please indicate by tick mark)

(a) As separate institution Yes/No

(b) As part of primary school Yes/No

(c) Day/ Residential/Both

If Residential

(i) Do you have your own Hostel Building? Yes/No

(ii) What type of accommodation is given to the students?

Single bed/double/bunk bed

(iii) Is there any game facilities given? (Please specify)

(iv) Type of food provided.

Are you satisfied it is nutritional balanced?

Fully satisfied/Partly satisfied/not satisfied.

(v) Is there any facility for health? Yes/No

If yes, please specify.

(vi) Are special coaching classes provided to the boarders? Yes/No

(vii) Are the students helped by the teachers/warden in completing their homework? Yes/No.

(d) Admission details: (please tick the appropriate one).

i) Age of entry into school.

a) 2 + years.

b) 3 + years.

c) 4 + years.

d) 5 + years.

e) 6 + years.

ii) Mode of admission:

a) All applicants selected. Yes/No.

b) Selected after personal interview. Yes/No.

c) Selected after written test. Yes/No.

d) Whether parents interviewed. Yes/No.

(e) Medium of instruction:

i) English.

ii) Local language (name).

iii) Any others (please specify).

(f) Type of programme run and its duration:

i) Name of course/programme offered (Please tick the appropriate ones).

a) Pre-Nursery. b) Nursery

c) L.K.G. d) U.K.G

e) Class A. f) Class B.

g) Montessori. h) Kindergarten.

i) Angananwadi.

ii) Classes/Sections (Please tick the appropriate one)

a) Number of Classes run in the school. 1/2/3/4.

b) Number of section in the class. 1/2/3.

V. Details of student and Teachers:

(a)Enrolment: (Please indicate the enrolment of 1998 session).

Class	Boys	Girls	Total

(b) Mode of appointment of teachers: (Please indicate by tick mark).

i) Written test.

ii) Personal interview.

iii) Selected by authority.

iv) Selected by Head.

(c) Particulars of the Teaching Staff: (Please fill in with appropriate details).

Names	Males/Females	Educational Qualification	Special Training in pre-school education
Head:			

Teachers:			
1.			
2.			
3.			
4.			

Helpers:

1._____

2._____

(d) Parent - Teacher Association:

i) Does your school maintain parent-teacher association? Yes/No.

ii) Does your school have get-together of parents and teachers? Yes/No.

iii) Does your school celebrate parents' day? Yes/No.

iv) Does your school celebrate annual school days? Yes/No.

v) Does your teaching staff make home visits? Yes/No.

vi) Does your school arrange meeting interview of parents? Yes/No.

VI. School organization Pattern:

(a) Daily programme: (Please fill with appropriate timings).

i) Working hours of school: _____

ii) Arrival time of teacher:_____

iii) Arrival time of children:_____

(iv) Daily Schedule:

A) School assembly:

Devotional prayer/assembly organized? Yes/No.

If yes, how organized? (Please tick the appropriate one).

i) By song and prayer in the assembly in the morning.

ii) By song and prayer in the morning inside the classroom.

iii) By song and prayer at the end of the school day.

B) Periods:

i) Number of periods:_____

ii) Duration of periods:_____

C) Activities:

i) Academic: (Please give details under each head).

Class	Subject taught	Text book used, if any	Exercise books, if used	Additional books used

ii) Home work:

Home work given. Yes/No.

If yes, how? Please give details.

iii) Physical Education and Recreational activities:(Please give details).

Class	Rest period	Co-curricular activities. Any outdoor and indoor activities organized	Play activities individual/group activities organized

iv) Food/Refreshment:

Does your school provide food/refreshment? Yes/No.

If yes, is it

a) free.

b) charged collected.

c) Items of food provided (please specify).

---

v) Medical/Health check up:

Does your school take care of the following (Please tick).

a) Personal hygiene of the children.

b) Checking of height and weight.

c) Checking of physical fitness.

d) Medical check up by a qualified doctor.

e) Any others (Please specify)

---

vi) Does your school observed important National/Local festival in school? Yes/No.

If yes, what days (Please specify).

VII. Method of Instruction followed and teaching-learning aids and materials available in the school:

a) Mode of Instruction adopted: (Please indicate by tick mark).

i) Lecture.

ii) Translation.

iii) Demonstration.

iv) Play - way.

v) Activity method.

vi) Any others (please specify).

b) Teaching-learning aids and materials: (Please indicate by tick mark).

Are teaching-aids and materials kept in school? Yes/No.

i) Puppets. ii) Toys

iii) Block building. iv) Paints.

v) Drawing vi) Sand plays.

vii) Swings.

viii) Any others (specify).

VIII. Infra-structure and other facilities:

a) Building and rooms (Please indicate by tick mark).

i) Does your school have sufficient numbers of class rooms. Yes/No.

ii) Does your school have a teachers common room. Yes/No.

iii) Does your school have a store room. Yes/No.

iv) Do you think that the design of the classroom is comfortable with sufficient ventilation and lighting? Yes/No.

v) It has,

a) Cemented floor. Yes/No.

b) Earthen floor. Yes/No.

c) Wooden floor. Yes/No.

b) Garden and playground:

i) Does your school have a spacious playground? Yes/No.

ii) Does your school have a garden? Yes/No.

c) Furniture and Materials:

Are the following furniture, equipment and stationary provided?

i) Desks and chairs for teachers and students. Yes/No.

ii) An almirah for books and others. Yes/No.

iii) Attendance register, chalk, duster, black board. Yes/No.

iv) Ceiling fan. Yes/No.

v) Dinning tables and chairs Yes/No.

vi) Tumblers, plate, spoon etc. Yes/No.

vii) First aid box. Yes/No.

viii) Health cards and growth cards. Yes/No.

ix) Play/games materials

d) Sanitation:

Does your school have a proper sanitation facility? Yes/No.

If yes, then is it properly maintained and hygienic? Yes/No.

e) Library facilities:

Does your school provide library facilities? Yes/No.

If yes,

i) What facilities is provided? (Please tick the appropriate one).

a) Sufficient reading rooms.

b) Sufficient reading materials.

c) Sufficient furniture.

ii) Do the children use the facilities?

Always/ sometimes/ rarely.

IX. Finance:

a) Source of Finance:

i) Government grants Rs._____

ii) Local body grants Rs._____

iii) Church donations Rs._____

iv) Donations Rs._____

v) Fees Rs._____

vi) Any others (specify) Rs._____

b) Total amount in Rs._____

c) Fees structures: (Annual).

i) Tuition Rs._____

ii) Admission Rs._____

iii) Library Rs._____

iv) Food Rs._____

v) Building funds Rs._____

vi) Books, teaching aids etc. Rs._____

vii) Music / Arts etc. Rs._____

viii) Any others (specify) Rs._____

d) Expenditure:

i) Salaries Rs._____

ii) Maintenance Rs._____

iii) Aids, library Rs._____

iv) Rent Rs._____

v) Others (please specify) Rs._____

X. Cumulative Records:

Does your school maintain cumulative development records? Yes/No.

If yes, is it maintained for each child?

Yes/No.

What kind of information is recorded? (Please indicate by tick mark).

a) Admission particulars: Yes/No.

_____

_____

b) Health records/growth charts: Yes/No.

_____

_____

c) Academic Achievement Status: Yes/No.

_____

_____

d) Personality characteristic: Yes/No.

If yes, which of the following? (Please tick).

i) Social relations ii) Emotional stability.

iii) Leadership qualities. iv) Co-operations.

v) Adjustment pattern. vi) Interest pattern.

XI. Problems faced in handling children with problems:

As a Head of Institution, do you find any difficulty in handling children with problems. Yes/No.

If yes, please indicate?

a) What kinds of problems do you encounter?

_____

_____

b) How do you handle the problems?

_____

_____

XII. Outcome of activities and programmes:

With all the activities and programmes that you organize, what do you think are the outcome in relation to education of children? (Please give details).

XIII. Problems faced in running the Schools:

What are the problems faced in running your school?

a) Building and rooms.

b) Playground/garden.

c) Play materials for children.

d) Teachers not qualified.

e) Apathy of government.

f) Funds.

g) Poor response from parents.

h) Any others (please specify).

XIV. Suggestions/Plans for toning up the quality of work:

What are your suggestions/plans for toning up the quality of work in your Institution.

APPENDIX B

TEST OF PROFICIENCY FOR THE CHILDREN

LANGUAGE TEST

1) Ability to give ones name, age, address, etc (how old are you?)

2) Knows the name of the school.

3) Identify parts of the body (show me your ear, tongue, hair and knees).

4) Naming and use of objects (key, paper, knife and bad0.

5) Naming and identification of objects (rose, paper, needle, cow, book and clock).

6) Responds correctly to simple instructions involving locations.

7) Listens to and follows verbal directions.

8) Uses of sentence of 4-5 words.

9) Uses of simple action words (run, walk) etc.

10) Uses complete sentences.

11) Repeats nursery rhymes.

12) Retells a story read to him in correct sequence.

13) Answer recall questions about story characters, actions etc.

14) Predicts and or construct story ending.

15) Retells experiences in organized fashion.

16) Writing of alphabets in small and capital letters.

NUMERICALS TEST

1) Counts to one hundred or (can be reduced i.e. the nos.)

2) Identifies numerals 1 to 100.

3) Naming and recognizing coins.

4) Recognizing numerical symbols.

5) Knows names of geometrical shapes and recognizes them.

Or

Points to basic shapes (circle, square, and triangle) on request.

6) Giving numbers of fingers.

How many fingers have you one hand.

How many on the other hand.

How many on both hands together.

7) If you have three and add two more how many will you have?

Or

How many will you have to add two to two, have four?

GENERAL AWARENESS

1) Buttoning and lacing.

2) Opening and closing door and boxes.

3) Naming colour or identifies colours.

4) Identifies pairs of familiar objects (shoes, socks, gloves, and earrings) like what is this or tell me what is this?

5) Points to different food objects on request.

6) Classifies foods: fruits, vegetables, and meats.

7) Classifies tastes: sweets, sour, salty, bitter.

8) Naming days of week.

9) Concept of time: morning, noon, today, tomorrow.

10) Distinguishing right and left.

Show me your right hand.

Show me your left ear.

Show me your right eye.

11) States functions of simple objects.

12) Interpreting pictures.

13) Thanking and expressing regret, meeting people and taking leave of them.

14) Temperature: hot and cold water, food, thermic sense material.

15) Touch: Different types of cloth, sandpaper, and paper.

16) What festival do you celebrate?

17) What do you do during the festival?

APPENDIX C

QUESTIONAIRE FOR THE CONCRENED TEACHER.

Children's Behaviour Check List.

Child's name:_____Age_____

School_____Location_____

Father's qualification: Hon's above/ B.A. or B.Sc./ Pu/ Matric/ under Matric/Illiterate.

Father's Occupation:_____Income permonth_____

Mother's qualification: Hon's & above/B.A. or B.Sc./Pu/Matric/under matric/Illiterate.

Mother's Occupation_____Income permonth_____

Direction: Check only those statements which you feel are really true of the child. Do not guess if you are not reasonable sure.

1) Vigorous and energetic in his attack on a project.

2.) Overcautious, not venturesome, afraid to attempt the untried.

3) Nearly always accomplishes task inspite of difficulties.

4) Voice animated, alive.

5) Does not become fatigued easily.

6) Poor in concentration.

7)Merely copies other children's reactions, not original.

8) Concentrates well at his task.

9) Original and inventive reactions.

10) Curious and questioning.

11) Expresses himself well for his Age.

12) Resourceful in dealing with difficult situations.

13) Poor use of language for his age.

14) Patient.

15) Absorbed: self-sufficient in his activity.

16) Restless: certain dissatisfaction with his own activity.

17) Retiring: wishes to be in the background.

18) Even-tempered.

19) Frequently disturbed: easily upset by the disagreeable or exciting.

20) Seldom disturbed: sudden changes in mood infrequent.

21) Slow to adjust to a novel experience.

22) Original in play.

23) Is easily distracted from task at hand.

24) Gives up easily, lacks persistence.

25) Submits to any child who takes the initiative.

26) Dominates children of his own age (either sex).

27) Will submit to a specific child only.

28) Submits to a leader only after a struggle to dominate.

29) Is a follower in one specific group only.

30) Occasionally dominates a group.

31) Usually leads a small group.

32) Decides who shall participate in the group activities.

33) Can organize the activities of a group to carry out a definite purpose.

34) Leads or follows as the occasion demands.

35) Neither leads nor follows; play alone.

36) Dominates other children through his ability to talk effectively.

37) Dominates other children through their love or admiration for him.

38) Dominates other children through his wealth of ideas.

39) Definitely schemes to get others to carry out his plans.

40) Gives commands with an air of finality.

41) Helpless unless someone organizes activity for him.

42) Hesitates to initiate activity.

43) Usually follows the ideas of others for activity.

44) Usually has his own ideas for activity.

45) Usually takes the initiative.

46) Does not push the issue in case of opposition.

47) Fights for his place as leader.

48) Insists that other children do as he wishes.

49) Does not defend his own rights with other children.

50) Easily led into mischief by others.

51) Fails to secure cooperation when he tries to direct activities.

52) Gets willing cooperation easily.

53) Almost never laughs or smiles.

54) Has an usually good sense of humour.

55) Has a way of making an appeal with his eyes.

56) Has a pleasing manner of speech.

57) Thoughtful of others.

58) Moderately selfish.

59) Sympathetic nature.

60) Inconsiderate of others.

61) Polite.

62) Mischievous.

63) Brave when hurt.

64) Truthful.

65) Seldom cries.

66) A good sport.

67) Rough and ready.

68) Forgiving nature.

69) Wanders around aimlessly.

70) Self-conscious.

71) Intelligently cooperate.

72) Often shows off or acts silly.

73) Makes pleasant conversation with adults.

74) Unaffected, spontaneous, natural.

75) Imaginative.

76) Lacks imagination.

77) Eager to try new things.

78) Seems to have a plant for every minute.

79) Brimming over with ideas for activity.

80) Plays or works vigorously.

81) Haphazard methods of work or play.

82) Lacks self-confidence.

83) Adjusts immediately to the daily routine.

84) Always goes through the daily procedure willingly.

85) Has to be constantly urged to carry out routine activities.

86) Takes a long time to adjust to the daily routine.

87) Response readily to direction in the day's routine.

88) Proceeds as usual with routine in the presence of visitors.

89) Is businesslike and systematic in endeavoring to carry out routine activities.

90) Dawdles over routine activities.

91) Always cooperates in trying to keep the schoolrooms neat and clean.

92) Perfectly natural in the presence of adults.

93) Matter of fact in his relations with adults.

94) Independent of adult in overcoming difficulties.

95) Dependent upon adult to solve difficulties.

96) Independent of adult in having ideas about or planning work or play activities.

97) Resents aid from adults.

98) Pays no attention to visitors.

99) Bids for attention from adults.

100) Craves affection from adults but is afraid to show it.

101) Beautiful features.

102) Usually pleasant facial expression.

103) Expressive eyes.

104) Stands erect.

105) Walks with ease and grace.

106) Does not take possessions of other children without permission.

107) Takes good care of school property while using it.

108) Wants to keep a particular piece of equipment even if not using it himself.

109) Gives up equipment to other children as soon as finished with it.

110) Extreme sense of property rights and keen desire to see this enforced.

111) Shows extreme consideration for school property.

112) Shows extreme consideration for possessions of others.

113) Takes good care of his own possessions.

114) Takes good care of the possessions of other children.

115) Adds cooperatively to suggestions.

116) Lags in following suggestions.

117) Responds without undue delay to authority.

118) So absorbed in his own thoughts that does not comprehend.

119) Cooperative and responsible.

120) Makes friends with other children easily.

121) Finds it difficult to approach other children and make friends.

122) Makes friends with any child who happens to be around him.

123) Resents interest shown by other children; wants to be left alone.

124) Does not responds to friendly advances.

125) Tries to make entry into group of children but fails.

126) Unhappy if he is not playing with other children.

127) So absorbed in his own ideas that he pays no attention to other children.

128) Contributes to the ideas of the group though not a leader (cooperative companion)

129) Hesitant in making suggestions to other children.

130) Assumes a protective attitude towards other children.

131) Usually pleasant with other children.

132) Often abrupt and surly with other children.

133) Ha a pleasant manner of securing cooperation from other children.

134) Has strong likes and dislikes for other children.

135) Rather placid attitude toward other children; neither likes or dislikes them to any degree.

136) Quarrels with other children, often over trivial thing.

137) Seldom quarrels with other children over trivial matters.

138) Rough and mean with other children.

139) Hurts other children often due to carelessness.

140) Impatient with other children.

141) Very critical of other children.

142) Is a good sport when he loses to some other children.

143) Is sympathetic toward other children.

144) Affectionate toward other children.

145) Tries to help the smaller children.

146) Resents aid from other children.

147) Forgiving of other children who have hurt him, taken his belonging.

148) Tries to get even with a child with whom he is angry.

149) Talks to other children a great deal.

150) Seldom talks to other children.

151) Cries easily in playing with other children.

152) Generous in letting other children share activities and possessions.

153) Attention from other children leads him to "show off" or act silly.

154) Not jealous if other children play with his particular friends.

155) Faces the issue squarely.

156) Concentrates his energy to accomplish a difficult task.

157) Meets situations in a quite matter-of-fact manner.

158) Dawdles to avoid a difficult task.

159) Accepts necessary facts as a matter of course.

160) Does the best he can with what he has.

161) Recognizes and accepts the superiority of another child.

162) Accepts just criticism willingly.

163) Finds it difficult to accept just blame for his faults.

164) Regresses to babyish behaviour in the face of difficulty.

165) Quietly accepts success.

166) Knows when he has done a task well.

SCORING KEYS

1.	[x]	A	13.	[ ]	D	25.	[ ]	G
2.	[ ]	ADG	14.	[x]	B	26.	[x]	G
3.	[x]	A	15.	[x]	B	27.	[x]	G
4.	[x]	D	16.	[ ]	B	28.	[x]	G
5.	[x]	A	17.	[ ]	ADG	29.	[x]	A
6.	[ ]	B	18.	[x]	F [ ] G	30.	[ ]	A
7.	[ ]	A	19.	[ ]	F [x] G	31.	[x]	A
8.	[x]	AB	20.	[x]	F [x] G	32.	[x]	G
9.	[x]	A	21.	[ ]	A	33.	[x]	A
10.	[x]	D	22.	[x]	A	34.	[x]	D
11.	[x]	D	23.	[ ]	B	35	[x]	C
12.	[x]	C	24.	[ ]	A	36.	[x]	A

37.	[x]	A	60.	[ ]	B	83.	[x]	B
38.	[x]	A	61.	[x]	B	84.	[x]	B
39.	[x]	A	62.	[ ]	B	85.	[ ]	B
40.	[x]	G	63.	[x]	C	86.	[ ]	B
41.	[ ]	A	64.	[x]	B	87.	[x]	B
42.	[ ]	G	65.	[x] F [ ] G		88.	[x]	F
43.	[ ]	G	66.	[x]	B	89.	[x]	B
44.	[x]	A	67.	[ ] D [x] G				
45.	[x]	A	68.	[x]	B	91.	[x]	B
46.	[ ]	G	69.	[ ]	A	92.	[x]	F
47.	[x]	G	70.	[ ]	F	93.	[x]	F
48.	[x]	G	71.	[x]	D	94.	[x]	AC
49.	[ ]	AG	72.	[ ]	B	95.	[ ]	AC
50.	[ ]	B	73.	[x]	D	96.	[x]	AC
51.	[x]	G	74.	[x]	D			
52.	[x]	A	75.	[x]	A	98.	[x]	F
53.	[ ]	D	76.	[ ]	A	99.	[ ]	F
54.	[x]	E	77.	[x]	A	100.	[ ]	F
55.	[x]	DE	78.	[x]	A	101	[x]	DE
56.	[x]	D	79.	[x]	A	102	[x]	D
57.	[x]	B				103.	[x]	DE
			81.	[ ]	C			
59.	[x]	B	82.	[ ]	D	104.	[x]	E

105	[x]	E	136.	[ ]	F [x] G
106	[x]	B	137.	[x]	F [ ] G
107.	[x]	B	138.	[ ]	D
108.	[ ]	B	139.	[ ]	B
109.	[x]	B	140.	[x]	G
110.	[x]	BH	141.	[ ]	D
111.	[x]	B	142.	[x]	B
112.	[x]	B	143.	[x]	B
113.	[x]	BH	144.	[x]	D
114.	[x]	BH	145.	[x]	DH
115.	[x]	A	146.	[ ]	D
116.	[ ]	H	147.	[x]	DH
117.	[x]	B	148.	[ ]	BH
118.	[x]	C	149.	[x]	AD
119.	[x]	B	150.	[ ]	AD
120.	[x]	D	151.	[ ]	F [x] G
121.	[ ]	D	152.	[x]	F
122.	[x]	D	153.	[ ]	B
123.	[ ]	D	154.	[x]	F
124.	[x]	C	155.	[x]	H
125.	[ ]	D	156.	[x]	H
126.	[ ]	C	157.	[x]	HD
127.	[x]	C	158.	[ ]	C
128.	[x]	D	159.	[x]	B
129.	[ ]	D	160.	[x]	B
130.	[x]	DH	161.	[x]	B
131.	[x]	BH	162.	[x]	F
132.	[ ]	F[x]G	163.	[ ]	F
133.	[x]	D	164.	[ ]	H
134.	[x]	H	165.	[x]	B
135.	[ ]	H	166.	[x]	B

FOR CONVERTING RAW SCORES INTO MODIFIED STANDARD SCORES

Modified Standard Score Equivalent	Raw Factor-score Range							
	A(1)	B(2)	C(3)	D(4)	E(5)	F(6)	G(7)	H(8)
1.	0-1	0	-	0-7	-	0	0	0
2.	2	1	0	8	-	1	1	1
3.	3-6	2-5	1	9-11	-	2-3	2-3	2
4.	7-9	6-10	2	12-15	0	4-6	4-6	3
5.	10-13	11-16	3	16-19	1	7-8	7-9	4-5
6.	14-17	17-21	4	20-23	2	9-11	10-11	6
7.	18-21	22-26	5	24-26	3	12-13	12-14	7
8.	22-25	27-32	6	27-30	4	14-15	15-17	8-9
9.	26-29	33-37	7	31-34	5	16-18	18-19	10
10.	Above 29	Above 37	Above 7	Above 34	Above 5	Above 18	Above 19	Above 10

APPENDIX D

SOCIO-ECONOMIC STATUS SCALE

(Weightage for items appear in parenthesis)

Scoring Key of the Socio-Economic Status Scale

A.	Education:	Score
	1. Professional degree or Hons., M.A., and above.	(7)
	2. B.A. or B.Sc. degree.	(6)
	3. Intermediate or P.U.	(5)
	4. High School certificate/H>S.L.C examination.	(4)
	5. Middle school completion.	(3)
	6. Primary school or literate.	(2)
	7. Illiterate.	(1)
B.	Occupation:	
	1. Professional	(10)
	2. Semi-professional	(6)
	3. Clerical, shop owners, farm owners etc.	(5)
	4. Skilled worker	(4)
	5. Semi-skilled worker	(3)
	6. Unskilled worker	(2)
	7. Unemployed	(1)

C. Income:

1. Above Rs. 7001 and above. (12)
2. Between Rs. 6001 - Rs. 7000. (10)
3. Between Rs. 5001 - Rs. 6000 (6)
4. Between Rs. 4001 - Rs. 5000 (4)
5. Between Rs. 3001 - Rs. 4000 (3)
6. Between Rs. 2001 - Rs. 3000 (2)
7. Below 200 (1)

Total of A+B+C = Total SES.

APPENDIX E

List of institutions included in the sample.

1. *Holy Cross High School.*
2. Sharon High School.
3. Ram Janaki High School.
4. Tiny Tots Chool.
5. Neingulie Memorial High School.
6. Assembly of God School.
7. Kindergarten English School, Lake View Colony.
8. King David School.
9. Eden English School.
10. Christ King School.
11. Little Star School.
12. Mother Mary School.
13. Cambridge High School, Lingrijan.
14. New Horizon School.
15. Lorna's School, Purana Bazar.
16. Don Bosco School.
17. Dimapur Mission School.
18. Assiss School, Khermahal.
19. Pilgrim Nursery School.
20. St. Edmund's School, ADC, Court Junction.
21. Namghar English School.

22. Lima Aier Memorial School.

23. St. Mary Montessori School.

24. Dimapur Public School.

25. Unity Christian English High School, Diphupar.

26.St. Paul School, Signal Basti.

27. Greenwood Higher Secondary School, Nagarjan.

28. Christ King School.

29. Living Stone Foundation School, Thahekhu.

30. St. John Higher Secondery School, Diphu Road.

31. Little Angel School, 3rd Mile.

32. Godwin School, Chumukedima.

33. Vision Home School, Diphupar.

34. Trinity School, Thahekhu.

35. Breezedale School, Nagarjan.

36. Government Primary School, Purana Bazar.

37. Government Town Primary School.

38. Dimapur Railway High School.

39. Government Primary School, Burma Camp.

40. Government Primary School, Duncan (Lotha).

41. Govenment Middle School, Lingrejan.

42. Government Primary School, Duncan (Ao).

43. Government Primary School, Nuton Basti.

44. Government Primary School, Midland.

45. Government Primary School, Lhomithi Colony.

46.Government Primary School, Nagarjan.

47. Government Primary School, Dobagoan.

48. Government Primary School, Darogajan.

49. Government Primary School, Sarbura.

50. Government Primary School, Singrijan.

51. Government Primary School, Padun Pukhuri.

52. Government Primary School, Chumukedima.

53. Government Primary School, Naharbari.

54. Government Primary School, Signal Angami.

55. Government Primary School, Aoyimti Village.

56. Government Primary School, Showuba Village.

57. Government Primary School, Naga United.

58. Government Middle School, Sangtamtila.

59. Government Primary School, Diphuphar (Ao).

60. Anganwadi Centre, Island Colony.

61. Anganwadi Centre, Neisatuo Colony.

62. Anganwadi Centre, Nepali Kashiram.

63. Anganwadi Centre, Darogapathar.

64. Anganwadi Centre, Ao Yimti.

65. Anganwadi Centre, Duncan B.