

**DEVELOPMENT DURING EARLY CHILDHOOD:
PRE-PRIMARY EDUCATION IN NEPAL**

**THESIS SUBMITTED TO THE UNIVERSITY OF DELHI
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY**

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CERTIFICATE

This is to certify that the thesis entitled “**Development during Early Childhood: Pre-Primary Education in Nepal**” submitted to the University of Delhi for the degree of Doctor of Philosophy is a faithful record of bonafide research work carried out by Nirmala Upreti under my supervision.

To the best of my knowledge, the work presented in this thesis is original and it has not been submitted to any university for any degree whatsoever.

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ABSTRACT

The present study “Development during Early Childhood: Pre-primary Education in Nepal” was conducted to explore the Early Childhood Programmes in Nepal. The specific objectives were to survey the various preschool programs in Kathmandu and to assess the quality of the selected pre-primary schools in relation to developmental needs of preschool children. This study attempted to compare the overall development of pre-primary school going children with those who have never attended a preschool programme. To understand the cultural context within which the early childhood programmes run the perspectives of other stake holders such as principals, teachers and parents of children attending the selected pre-primary schools were also included in the study.

Eighteen private and government pre-primary schools from the rural, semi-urban and urban areas of the Kathmandu district were selected for the study. The selection was based primarily on accessibility and permissions by the management of the schools. This was critical as Nepal was going through political turmoil and violence during the period of data collection. The overall learning environments of the selected schools were evaluated using Early Childhood School Environment Observation and Rating Scale (ECSEORS). A total sample of 144 children aged 48-50 months, 8 (4 boys +4 girls) from each school also comprised the sample. Fifty six children of the same age who had not attended any preschool programme were also identified for the study. The total sample of children selected for the study was 200.

The Development Assessment Measure (DAM I & II) were used to assess the overall development of children in pre-schools and also children not attending any pre-school. These were based on several standardized and available tools. They were translated into Nepali and adapted to suit children of Nepal. A Teacher Rating Scale (TRS) was used for assessing children’s classroom behaviour and performance by the class teacher.

The findings have been discussed under four major sections- survey, observations of school environment, children’s developmental assessment, and perspectives of principals, parents and teachers.

According to Flash Report 2010/011 there are 31,089 ECD/PPC s in the country, 26,733 (86.1%) ECDs are running as community- based ECD centres and

community school based ECD/PPs. Thus rest 4316 (13.9%) of the ECD/PPCs are run by private schools.

In general schools are located in wide variety of geographical location (mountain, plain, rural, semi-urban, and urban) in Nepal. In some semi-urban and urban government schools there are lots of learning and playing materials in the class room and classrooms are also arranged according to ECD curriculum. Most of the teachers use traditional methods of teaching despite of the fact that they had received a short time training (2 to 3 weeks) for primary classes or early childhood development. The teacher commonly uses teacher directed teaching styles which focus on text books and examinations. While schools especially Government schools are expected to meet the needs of National Curriculum, teachers often spend significant amount of time on tasks other than teaching.

Private schools have been established on a massive scale, not only in towns but also in remote villages. In the absence of a clear policy these private schools choose their own management system and set their own policies for student fees and teacher salaries. Their costs seem to be decided without a clear basis and appear to be motivated by profitability. A private school is generally seen as an institution that provides education of better quality and parents have to spend lots of money for their child's education.

In my research work 18 schools were observed. In the physical set up domain only 2 private schools were excellent and other 9 were good. Of these nine schools, 4 were private schools and 5 were government schools. Quality of school buildings, class rooms and indoor outdoor space of government schools was good compared to private schools running in rented buildings. But in sanitary facilities, class room arrangement, and in indoor equipment private schools were good as compared to government schools. Compared to government schools private schools had neat and clean surroundings though space was not enough for the children.

In health and hygiene practices and facilities only 1 private school was excellent and other 3 schools were good. Among three one was a government school and 2 were private schools. Other 14 were poor in health and hygiene domain. There was no lunch or Tiffin program in almost all sampled schools. Only in two private schools there was a lunch program in the school and it was well managed. The school

management was aware of the importance of nutrition and neatness and cleanliness in the feeding program. In one private school which has only pre-primary classes, school-provided Tiffin was quite expensive and it was compulsory. In another school also it was compulsory but not so expensive and quality of food also good.

In conceptual /curricular content, private schools were excellent in different activities compared to government schools. Though government schools have enough spaces for the children to play, the teacher does not follow the daily time schedule and they do not give much time for physical activities. But in private schools teachers give ample time to the children for physical and other activities. Compared to rural schools, urban school teachers were more active and give much more attention to children in both government and private school. This was due to urban parents being much more aware and demanding than rural parents.

These results explicitly demonstrate that the school environment was not favorable and in accordance with the requirements. Government is spending a lot of money to improve the quality of buildings, library, science laboratories, toilets, and other physical facilities but money is not used properly.

Children's performance was assessed using DAM I and DAM II. DAM I evaluated a child in performance and verbal items. The *performance items* were, pattern making, following instructions, visual discrimination, classification matching, number concept, visual memory, temporal relationship, auditory memory and copying pattern and the *verbal items* were information, verbal problem solving, arithmetic reasoning analogies; action agent and story recall sequence. DAM II was used for assessing physical-motor development, fine motor development, socio emotional development, and self help skills for school going and non-school going children.

The results indicate that there no differences in overall scores on DAM I and DAM II between private and government school children. The differences are significant between school –going and non-school going children. Having access to school seems a crucial indicator for developmental outcomes.

Performance items and verbal items were best attempted by the private urban school children with mean scores of 62.17 and 88.71 respectively. Non school going children were the lowest with scores of 42.50 and 67.96 on the performance and

verbal items respectively. Private rural schools showed low practice in performance items as indicated by the low scores of children (43.04) attending them. The private rural schools did badly on performance items such as visual memory, temporal relationship, classification and auditory memory as well. All schools performed poorly on number concept items. On the verbal items all children performed well in areas such as information, problem solving and storytelling sequence. They performed poorly on arithmetic reasoning. Private rural schools performed badly on action agent items as well.

The difference in scores were significant in each area for school going and non-school going children in fine motor development, social-emotional development, self-help skills and overall Development Assessment Measurement II. This indicated that attending school does make a difference to the scores on the test used. Non-school going children were able to run, jump, climb, catch, throw, skip, hop, and balance easily so there is no significant difference in physical development among non-school going children and school going children in gross motor areas. But in fine motor skills there were a variety of activities in school like –threading beads, painting, colouring, pasting, writing, cutting and other activities. School going children scored high due to the fact that in school children have an opportunity to participate in a variety of activities.

While comparing government school children and private school children in fine-motor skills, private urban school children scored higher because there were lots of fine motor activities in the school. In self-help skills, children from government urban schools scored high because in private schools, teachers and caretakers help small children in different activities such as wearing, going to toilet and taking off shoes. Parent of private school children do not allow children to do simple work at home. In rural and semi-urban government schools, teachers did not help children much and did not care much about neatness and cleanliness so children were also on their own doing things for themselves. Most of the children in urban government schools were from low income families and were competent in doing household chores, so children were more confident and did their work by themselves. They can take care of their things - books, bag etc on their own.

The overall school environment and developmental assessment of children from selected schools provided an understanding of the influences of school on children in those spaces. Interestingly the non-school going child that constituted one subgroup of the sample provided the starkest developmental concerns. Going to school is important, is what the results indicate, even with the quality of the school being variable.

The conclusion from this is not that one should be content with programs of lesser quality but it does suggest that outcomes can be obtained in less than high quality programs. Also where budgets are extremely limited but inequities are great promoting high quality programs available to only a few can only increase inequities.

In brief, it would be unfortunate to put all our emphasis on quality defined in terms of outcomes, however measured. Many factors and numerous environments influence outcomes and it is hard to know how much to accredit to programmes and how much to family and community environments. A child lives in the present and should be entitled to positive and enjoyable experiences in the immediate environments in which she or he learns and develops.

To give priority and importance to the ECD programme and to recognize the importance of the child the government must make both policy and budgetary allocations to this sector and demand more accountability. Trained teachers and caregivers must be paid well and greater accountability demanded of them. Regular and fair monitoring must be done to promote and evaluate the quality of ECD programmes. Parental awareness programmes must be conducted before starting any ECD programme especially in the remote and rural areas of Nepal. When parents, caregivers, teachers and other adults understand the value of ECD programmes for their children then and only then can they be sustained and run well.

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ACRONYMS

AA	Action Agent
AM	Auditory Memory
AN	Analogies
AR	Arithmetic Reasoning
CBCDC	Community-based Child Development Centre
CBS	Central Bureau of Statistics
CBS	Central Bureau of Statistics
CCC	Child Care Centre
CERID	Research Centre for Educational Innovation and Development
CL	Classification
CR	Class room
DAM	Development Assessment Measure,
DEO	District Education Officer
DOE	Department of Education
ECCE	Early childhood care and education
ECCGD	Early childhood care growth and development
ECD	Early Childhood Development
ECE	Early Childhood Education
EFA	Education for All
FI	Following Instruction
FMS	Fine Motor Development
GON	Government of Nepal
GRS	Government rural school
GRSGC	Government rural school going children
GSUS	Government semi-urban school
GSUSGC	Government semi-urban school going children,
GUS	Government urban school

GUSGC	Government urban school going children
IN	Information
INGO	International Non-governmental Organization
IS	Indoor space
LO	Location
MM	Making Same Pattern
MOE	Ministry of Education
MOEC	Ministry of Education and Culture
MOECSW	Ministry of Education, Culture and Social Welfare
MSP	Making Same Pattern
NC	Number Concept
NGo	Non-governmental Organization
NSGC	Non school going children
OS	Out door space
PMD	Physical Motor Development,
PPC	Pre-primary class
PRS	Private rural school
PRSGC	Private rural school going children
PSUS	Private semi-urban school
PSUSGC	Private semi-urban school going children
PUS	Private urban school
PUSGC	Private urban school going children
SED	Socio-Emotional Development
SF	Sanitary facilities
SHS	Self Help Skills
SK	Shishu Kakshya
SLC	School Leaving Certificate
SR	Story Recall
SUR	Surrounding

TM	Temporal Relation
TU	Tribhuvan University
UNDP	United Nations Development Fund
UNESCO	United Nations Educational, Social and Cultural Organisation
UNICEF	United Nations Children's Fund
USA	United States of America
USAID	United States Agency for International Development
VD	Visual Discrimination
VDC	Village Development Committee
VM	Visual Memory
VPS	Verbal Problem Solving
WHO	World Health Organization
EDR	Eastern Development Region
CDR	Central Development Region
HMG	His Majesty Government

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1. INTRODUCTION

1.1 Nepal

Nepal is a small country located in South Asia. It is a multi-cultural country and the 2011 census, indicates that it has a total of 102 ethnic groups and 92 languages. The official language of the country is Nepalese. It extends about 850 kilometers from east to west and about 200 kilometers from north to south, and comprises of 147,181 square kilometers of land (CBS, 2011).

Figure 1: Nepal in the Map of Asia



Known for its majestic Himalayas, which in Sanskrit means the abode of snow, the country is situated mainly along the southern slopes of the Himalayas, the highest chain of mountains in the world. One-third of the 2,400 kilometer Himalayan range lies in Nepal. Nepal is land locked country. The country is surrounded by India on three sides and by the China's autonomous Tibetan land to the north. It is separated from Bangladesh by 15-kilometer wide strip of Indian West Bengal, and from Bhutan by 88-kilometer wide Sikkim. The nearest seaport, Kolkata, India, is at a distance of 400 kilometers. Nepal is highly dependent on India for transit facilities

and access to the sea (nearest sea port is in the Bay of Bengal) and is even dependent on Indian sea port for most of the goods coming from China.

Nepal has an interesting physical diversity, ranging from *Tarai*, (which is the northern part of the Genetic plain) about at about 70 meters above the sea level to the 8,848-meter high *Sagarmatha* or the Mount Everest in the north, there are valleys between the mountain ranges that punctuate the rise in elevation. Within this maze of mountains, hills, ridges, low valleys, and changes in altitudes, a wide range of ecological variations can be found. In Nepal, almost all climatic conditions in the earth can be found ranging from tropical rain forest of the *Tarai* to the arctic desert wastes in the higher regions and in the arid zone of the Tibetan plateau.

Figure 2: Map of Nepal



Nepal has three principle river systems from east to west: the Kosi, the Gandaki, and the Karnali; they are the main tributaries of the Ganga (Ganges) River in northern India. Flowing through deep gorges, these rivers deposit their heavy sediments and debris on the plains, thereby nurturing them and renewing their alluvial soil fertility. When they reach the Tarai, they often cause floods during the summer monsoon season, periodically shifting their courses. The Kosi has seven tributaries known as Sapta Kosi, they are-Tamur, Likhu Khola, Dudh koshi, Sun koshi, Indrawati, Tama, and the main tributary Arun, which springs about 150 kilometers

inside the Tibetan plateau. This river system drains the eastern part of the country. The Gandaki drains the western Nepal; its main tributaries are Daraudi, Seti, Madi, Kali or Ramdi, Marsyandi, Buri, and Trisuli; when these flow and meet in Tarai, they become Narayani River. The Kali, also called as Kali Gangaki by the people of western Nepal, flows between the Dhaulagiri and the Annapurna Himalayas; it is the main river of this drainage system. The river system draining the far west is the Karnali, it has three main tributaries- Bheri, Seti, and Karnali; others are the Maha Kali flowing along the Nepal-India border on the west, and the Rapti.

The people of Nepal view their country in three parts- *Himal* (Mountain), *Pahad* (Hill), and *Madesh* (Tarai). *Himal* is situated at 4,000 meters or more above the sea level to the north of the *Pahad* or the hill region. It constitutes the central portion of the Himalayan range originating in the Pamirs, a high altitude region of Central Asia. Its landscape includes the Mount Everest and the other seven of the world's ten highest peaks. In general, the snowline occurs between 5,000 and 5,500 meters. People view the land that extends from high *Himal* to the Tibetan land as *Bhot*, areas such as *Manang*, *Mustang*, *Humla*, and *Dolpa* consist a number of *Bhot* lands. No vegetation exists in most of the region, it is sparsely populated, and agriculture is mostly confined to the low-lying valleys and the river basins. There is no human habitation in the upper reaches. Six districts of Nepal are in this region; they are *Rasuwa*, *Manang*, *Mustang*, *Dolpa*, *Mugu*, and *Humla*. Due to the rugged condition unsuitable for farming, people came to practice pastoralism and trade, was widely practiced. The herders move their cattle shelters in accordance with the seasonal climatic rhythms, and the traders also moved seasonally between highlands and lowlands, buying and selling goods to generate the much needed income and to secure food supplies.

The *Pahad* is situated between the *Himal* and the *Mahabharat* range; it is mostly between 1,000 and 4,000 meters in altitude. This region comprises major portion of Nepal and accounts for 43 percent of the total land area. People view the *Pahad* into three regions, they are *Lekh* (high altitude areas), *Kachar or Gaun* (middle sub-tropical area, where there are many villages or gaun), and the *Besi* or the low-lying tropical area; these areas have a beautifully irrigated farms or *khets*. The terms

are also used in relation to snowfall, for instance, *Kachar* is without snowfall, *Lekh* with winter snowfall, and *Himal* with perpetual snowfall. Rivers criss-cross the *Pahad* in every direction. It includes some of the most beautiful and fertile valleys in the country such as Kathmandu, and Pokhara, etc, along with a rugged mountain topography, so the altitude can vary considerably within a short horizontal distance. Accordingly, climate and the vegetation show great variation over a very short distance, and give rise to great ecological diversity and complexity. Although the hills here are very steep, they have been made cultivable by fashioning terraces along the slopes where staple crops such as paddy, barley, buckwheat, maize and temperate vegetable and fruits are grown.

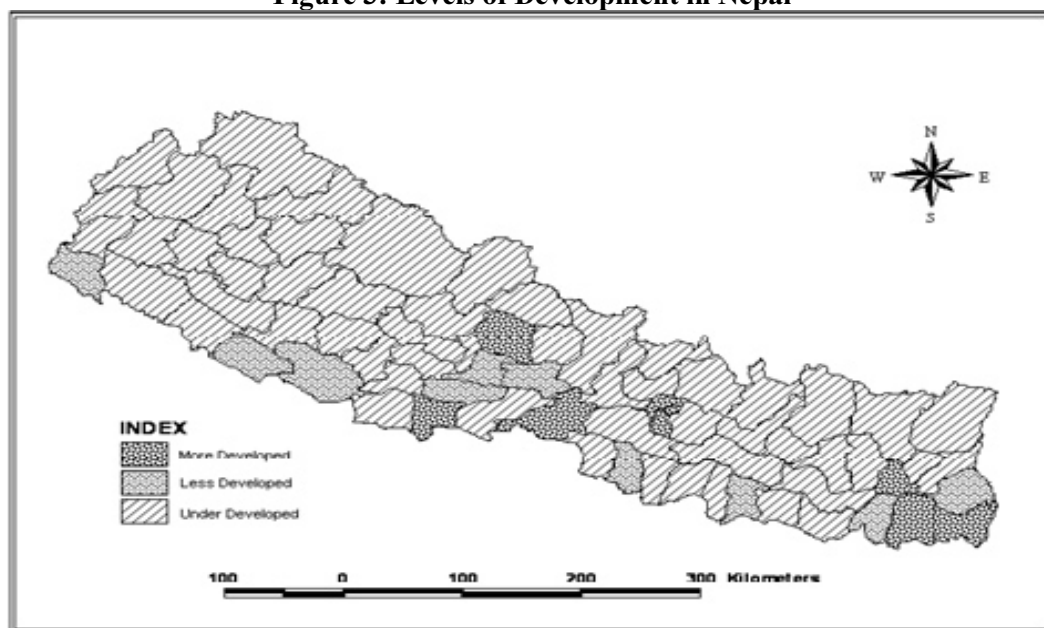
The *Mahabharat lekh* or range is 3,000 meters above the sea level; which is branches by several deep gorges through which the north-south rivers flow. It runs from west to east across almost the entire country. The Siwalik range, traditionally called as *Chure mala* or the *Churai* hill chain, averaging 1,500 meters in altitude, rise straight from the Tarai plains without any foothills, and runs closely parallel to the *Mahabharat lekh* to the north. At places, the Siwalik and the *Mahabharat lekh* are separated by low valleys called *Bhitri Madesh* or the inner Tarai, which comprises the districts of *Sindhuli* and *Udayapur* in the east, *Makwanpur* and *Chitwan* in the west and *Dang* and *Surkhet* in the far west.

The *Madesh* or the *Tarai* region, the word *Tarai*, is said to be Persian, meaning "damp," is a tropical and alluvial land stretching along the Nepal-India border, and paralleling the *Pahad*. The region is the northern extension of the Gangetic plains, commencing at about 300 meters above the sea level. This region is very fertile and is responsible for contributing to the major portion of Nepal's national income. The Tarai serves as the country's granary; hence, it continues to be coveted by the people of hills for agricultural land. It also consists of largest commercially exploitable forests.

The government has divided Nepal into five development regions within the framework of regional development planning. These are: Eastern Development Region (EDR), Central Development Region (CDR), Western Development Region

(WDR), Mid Western Development Region (MWDR) and Far-Western Development Region (FWDR) from east to west. For the purpose of administration, the country is divided into 14 Zones and 75 districts and 3915 village development committees (VDCs) and each tier has its own elected local government (CBS, 2011).

Figure 3: Levels of Development in Nepal



Source: ICIMOD/CBS/SNV-Nepal, December 2003 “Districts of Nepal, Indicators of Development.”

Hill region, although politically still dominant, remains an economic periphery in terms of overall development and the spatial allocation of resources. Of course, most of such resources are made available from outside in the forms of foreign aid and debts. Even in the context of regional trade within the nation, the hill region is a net importer of virtually every good or commodity with few exports. This fact is quite obvious if one observes the freight lorries traveling between the tarai and hill urban centers. While the hill-bound lorries are fully loaded with goods and commodities, the outbound trucks are invariably empty.

Nepal has adopted “economic planning” as an institutional vehicle of national development. The State became directly involved in the process of development and remains deeply entrenched. The first five-year plan was initiated in 1956. Since then ten more development plans have been launched. Over the years, the focus and

strategies of the planning have shifted from urban industrial emphasis to regional growth to the current focus on rural development and basic needs. These successive and periodic changes in development plans are largely a manifestation of the general failure of the preceding strategies. Despite acknowledgement of their failure to improve the economic conditions of the country and its masses, the contemporary Nepalese state has not forsaken its adherence to planning as an institutional process of development.

Planning remains popular despite the fact it has failed to deliver what it is expected. Two principal reasons why planning is so popular within the ruling elite circle are: (1) the State sees economic planning as an instrument of its political legitimacy and (2) it brings in foreign aid and loans: the easiest and surest sources of their personal enrichment. Given the underdeveloped state of the economy with few rich natural resources, the ruling elites have few reliable sources of wealth to tap in order to enrich their personal treasuries. Foreign aid and loans serve as substitute sources. There are few hard statistics on what percentages of foreign aid and loan received by the country is utilized with some efficacy or actually reaches the masses. A reasonable estimate perhaps around 10 per cent (Nepal, 2011).

According to the National Population Census 2011 the total population of the country is 2, 66, 20809 which shows an increase of population at the rate of 1.4% per annum. According to National Population Census 2001 population was 2, 31, 51423 and growth rate was 2.25% (Government of Nepal, Preliminary Result of National Population Census, 2011). Children are the national assets of the country. They are regarded as “rising sun”, “future star” or the “pillar of the Nation”. To prove these slogans true, the children should be cared for, ensuring the enhancement of physical, emotional, spiritual, social and cognitive development. Promoting early childhood development programs may be a good way.

Today, virtually every development project that is executed in the nation is either directly associated with foreign money or initiated directly by a foreign donor agency. The numbers of such agencies are in the rise. The question is whether increasing foreign aid has generated any real economic development, i.e., reduced

unemployment, inequality, and poverty. Based on various observations, the answer is hardly. Nepal is caught in a whirlpool of dependency. There is little doubt that growth of foreign aid or foreign aid-based development project has increasingly deepened its dependency. They have overall, caused a severe, if not irreparable, demoralization and erosion of local initiatives, energies, and technological foundations, despite of the fact that some of the projects were designed to revamp indigenous technologies.

The demography of the country has changed over the years. The decade-long conflict accelerated migration to urban areas. The conflict was a key factor in the increase of the urban population from 10 per cent in 1991, to 16 per cent in 2001, primarily due to the widespread migration of young people. (Kollmair, Manandhar, Subedi, & Thieme, 2006) Official data on international migration from Nepal indicates that the number of Nepalese living in foreign countries is over 1, 97 903 (CBS, 2011) the structure of the society is such that the brunt of poverty is felt most by women and children. Due to prevailing social norms, women face special challenges; for example their access to information is limited, their work-burden is high, and their mobility is restricted. The population growth rate remains high and was 2.25 per cent in 2001. Young people aged 10 to 24 years comprise 32 per cent of the total population, a record high level presenting concomitant challenges. (Nepal Demographic and Health Survey, 2006)

1.1.1 Political Situation in Nepal

Nepal became a constitutional monarchy in 1990. The new self Government of Nepal was formed in 24th April 2006. In Nepal's history 2006 was a significant year. In April 2006, People's Movement brought an end to the period of Autocratic Royal Rule and opened up a chance for the re-establishment of parliament. The day was golden date to all the Nepalese because *Loktantra* was came on that day. Since then instead of HMG (His Majesty Government) Nepal, Government of Nepal was formed. In this government education played an important role in all directions.

The coalition Government of Seven Party Alliance (SPA) and Communist Party of the Nepal (CPN/M) signed an historic Peace Accord on 21 November 2006 which ended the violence of 11 years long insurgency and opened a pathway towards lasting

peace and sustainable development in Nepal. Comprehensive Peace Agreement (CPA) was signed between an alliance of Seven Party Alliance Government and the Maoist followed by an agreement on arms management. After signing a peace deal by Maoist and seven parties, the Nepalese Civil War came to an end which had claimed more than 13,000 lives to death (Dahal & Mills, 2005).

At present Nepal is going through a period of potentially fundamental transformation, shaking off its feudal past and establishing a modern democratic State (Verma, 2001). The people demanded a 'New Nepal', the monarchy was suspended. The peace process subsequently achieved a remarkable milestone with formation of the new House of Representative on 15th January 2007.

The election was postponed twice and the Maoist having joined the Interim Government in April 2007, left in September though they remain committed to the implementation of the peace agreement.

The backdrop to the conflict and continuous unrest affecting Nepal is deep seated poverty, poor governance and discrimination in the context of a highly stratified society which allowed opportunities to be restricted to a limited number of caste, ethnicity and gender. This is where the root cause of conflict lies. There are many challenges that threaten forward movement with Nepal's political transition (Gurung, 2006).

Many of the fundamental barriers to progress in Nepal can only be addressed after a new constitution has been written by the Constituent Assembly (CA) and the structure of government at all levels has been settled. When in 2006 the peace agreement was signed marking the end of the Maoist armed conflict, it was hoped that Nepal had set a new course for political stability. The primary duty of the Constituent Assembly was to open a new Constitution by May 2010.

The historic Jana Aandolan II culminated into the declaration of the republic in Nepal on May 28, 2008 after the constituent assembly polls 560 CA members voted in favor of the republic, ending 240 years of monarchy (Amnesty International, 2010).

1.1.2 People and Culture of Nepal

Now Nepal has population of more than 28 million people made up to 40 different races and tribes. Nepal is a multilingual, multireligious and multiethnic society. According to the 2001 census, 92 different living languages are spoken in Nepal. The major languages are , Nepali (69%), Maitheli (7%), Bhojpuri (5%), Tharu (3%), Tamang (2%), Gurung(1.5%), Newari 1%) Magar (1%), Awadhi (1%), Rai, (1%) Limbu (1%) and Bajjika (1%) the remaining 81 language are each spoken as mother tongue by less than one percent of the population. Ethnic groups : Chettri 15.5%, Brahman 12.5%, Magar 7%, Tharu 6.6%, Tamang 5.5%, Newar 5.4% , Muslim 4.4%, Kami 3.9%, other 32.7% and unspecified 2.8% (Gurung, 2006).

Religions are another important part of Nepal's culture. Nepal was the world's last constitutionally declared *Hindu State*. But after the movement for democracy in early 2006 and sacking of the King, the Nepali Parliament amended the constitution to make Nepal a secular State. Hinduism is the primary religion in Nepal, followed by Buddhism and Christianity. In Nepal there are Hindu 80.6%, Buddhist 10.7%, Muslim 4.2%, and Kirant 3.6%, other 0.9%. there is no conflict within the religion of Nepal. Tolerance and harmony found in Nepal is a unique example for the world. There are many festivals, which are celebrated in Nepal and are religious in origin.

Nepali culture is marked by its rich diversity. The culture of Nepal includes music, dance, art forms, literature, religion and architecture in varied forms. Having numerous ethnic groups, religions, clans/cast Nepal has distinct culture of their own. Nepal is blessed with rich cultural history. Culture has been called the way of life for an entire society. This statement holds particularly true in case of Nepal where every aspect of food, clothing and even occupations are culturally classified. The culture of Nepal the codes of manners, dress, language, rituals, norms of behavior and system of belief. Nepal's populations are made up of many tribes, living in different regions, wearing different costumes and speaking different languages. The Sherpa live in the mountain regions and the Tharus live in Tarai regions. According to climate the Nepali people's clothing and food habits are also different. Because of Nepal's vast diversity in altitude that has reflected Nepal's unique culture. Most of Nepali people eat Dal- Bhat- and Tarkari (vegetable curry) as main food. Nepali food is less spicy

than Indian food. Nepali food, clothing and culture are mostly influenced by India and China. There are several temples, churches, synagogues and Buddhist monasteries in Nepal which are built in its own architectural style. The culture of Nepal is vividly depicted in these architectural wonders of Nepal. (Himalaya, 2006).

1.1.3 Women and Children of Nepal

According to the preliminary result (Census 2011, Sept 27th) reveals that the population of male and female in Nepal is 13693378 female and 12927431 male (total 26620809). Sex ratio of Nepal has decreased from 99.8 in 2001 to 94.41 in 2011 which support the scenario revealed in the proportion of absentee population. More male are leaving the country than female because of conflict and unemployment in the country. From this figure we also can assume that more male must have died in the conflict period after the census 2001. The preliminary result shows that the absentee population in Nepal increased to 19, 17903 which are more than double the absentee population in 2001.

The effects of conflict on children and families: Nepal has experienced a comparatively high loss of life, including many children. Moreover, thousands of children are dealing with the trauma caused by brutal killing of family members and neighbours and other violent events. Conflict has impacted the children's lives in four additional ways. The first has been the break-up and often complete disintegration of families. It is estimated, for example, that 8,000 children have been orphaned because of the conflict. Many more have seen their families torn apart as they have had to flee their homes and villages for fear of their lives. Male family members, in particular, have been forced to leave their villages to evade being caught up in the violence and the risk of being forcibly recruited by the Maoists or taken away for interrogation by government forces. In some of the village homes there are only old people, women, and children. This, in turn, has led to many families struggling to survive as they no longer have the human resources required to earn a living through agricultural work. Following on from this, the second key impact of the conflict has been to create thousands of families that are now internally displaced. Many of these initially fled their own homes and villages; but now, with the ceasefires, find it difficult to return

home. Many are unwilling to return home having seen their houses burned to the ground and their cattle being killed or taken away. Most of the displaced children have said that they do not want to return home. For their parents another barrier to returning home is that the life in the rural village is very hard. There is no basic infrastructure; no electricity, no road, and no drinking water, and, of course insufficient food. Therefore, despite the call from the Maoist rebels to return to their homes, most of these people are not willing to do so. The third key impact the conflict has had on children is the ongoing sense of fear that they feel and the restrictions this places on how they can go about their daily lives. Reports continue of children becoming injured and killed because of explosive devices left behind after the encounters. However, many more are having to learn to trust again and to begin regaining their confidence. For many, their only experience has been one where they have not been able to play freely and explore outside for fear of being abducted or caught in the crossfire. During the conflict, for example, it has been estimated that 31,000 children and teachers have been taken away by rebel groups for certain periods of time in order to indoctrinate them. Similarly, 254 children have been arrested by the state security forces for interrogation. Other children have seen their parents go to elaborate lengths to protect their older brothers and sisters in order to prevent them from being forced to join the rebel Maoist forces. The fourth and final key impact of the conflict on children's lives is in relation to its effects in restricting children's access to education. It has already been mentioned, for example, that schools have often been taken over by both rebel Maoists and government forces for meetings and shelter. For some children, schools are no longer seen as safe places; and it will take some time for them to regain their confidence and feel comfortable going back to school. Drawings sketched by an eight-year-old child reveal some of the alarm he has been experiencing in the school. His drawing of the school before the conflict showed how it was seen as a fun and happy place. He and his peers could play outdoors with play materials in a free and fearless atmosphere. However, his drawing of the school after the conflict showed how it was being shadowed by clouds of gunfire smoke with no play material available. There are people with guns around the school and the community. Interestingly, in the second picture he shows that even the sun is being covered by clouds. During the period January 2005 to May 2006 and before the

ceasefire, it has been reported that bunkers were built in at least 56 schools, a further 31 schools were affected by bomb explosions and at least eight schools were destroyed by setting fire. Some schools are still directly experiencing the presence of the security forces in their vicinities. During the 11 years of insurgency:

- 14,000 people have been killed
- 460 children have lost their lives and a further 535 have been injured
- 8,000 children have been orphaned
- 40,000 children have been displaced.

(Shrestha, 2011).

1.2 History of Early Childhood Education

Most of the early childhood educators, philosophers, and other concerned people know about the philosophy and works of Rousseau, Froebel, Montessori, Dewey, Socrates, Plato and Aristotle. Their work is part of philosophical foundation on which our educational practices are built (Gordon & Brown, 2004). Knowing that early childhood philosophy has deep roots can be an inspiration in itself.

The first kindergarten was a German school started by Froebel in 1836. Nearly 20 years later in 1856, Margaretha Schurz, a student of Froebel opened the first kindergarten in United States. The first public kindergarten opened in Saint Louis in 1873, development of preschool groups in USA has been continuous (Todd & Hefferman, 1970). The decade of 1960s involved not only a tremendous expansion in preschool education but also the demonstration that the early environment of a child is of a great importance in USA.

1.2.1 Friedrich Wilhelm Froebel

Froebel (1782-1852) was one of the major contributors to early childhood education, particularly in his organization of educational thought and ideas about learning curriculum and teacher training. He is known to us as the "Father of Kindergarten" not only for giving it a name, but for developing his life to the development of system of education for young children. The German word *Kindergarten* means "children's

garden” and that is what Froebel felt best expressed what he wanted for children less than six years of age. Froebel started his kindergarten in 1836, for children aged about two to six, after he had studied with Pestalozzi in Switzerland and had read the philosophy promoted by Comenius two hundred years earlier. His system was centered on self-activity and the development of children of children’s self-esteem and self confidence in his *Education of Man*, he wrote that “play is the highest phase of child development-the representation of inner necessity and impulse.” He had the radical idea that both men and women should teach young children and that they should be friendly facilitators rather than stern disciplinarians. Over 175 years ago Froebel’s kindergarten included blocks, pets and finger plays. Froebel observed children and came to understand how they learned and what they liked to do. He first developed the first educational toys which he termed “gifts”. Some of his theories about children and their education later influenced Maria Montessori and were reflected in the educational materials she developed (Gordon & Brown, 2004).

1.2.2 Maria Montessori

At the turn of the century, Maria Montessori (1870-1952), became the first female physician in Italy. She worked in the slums of Rome with poor children and with mentally retarded children. Sensing that what they lacked was proper motivation and environment, she opened a preschool; *Casa did Bambini* in 1907. Her medical background added treatability to her findings and helped her ideas gain recognition in the country. She was an especially observant person and used her observation to develop her programme and philosophy. The Montessori concept is both a philosophy of child development and a plan for guiding growth, believing that education begins at birth and early years are of the utmost importance. During this time, children pass through “sensitive periods”, in which their curiosity makes them ready for acquiring certain skills and knowledge. Montessori placed great emphasis on the environment-the “prepared environment” as she called it. In the Montessori Method, the role of teacher is primarily one of observer and facilitator. Teacher demonstrates proper use of materials and communicates as needed, avoiding any acts that might cause a child to become dependent on them for help or approval. The most striking feature of Montessori classroom is its materials and its curriculum. The materials are presented

in sequence, from simplest to most difficult. Montessori developed curriculum materials and task that are related to real life. In Montessori classroom, children work by themselves at their own pace. They are free to choose the materials with which they want to “work”- the word used to describe their activity. Children must accomplish one task before starting another one, including the replacing of the materials on the shelf for someone else to use. The prepared environment in a Montessori programme has child sized furniture and equipment-one of the Froebel’s idea that Montessori used (Gordon & Brown, 2004).

1.2.3 Head start in USA

Head start is a federally sponsored program for children from low income families. Established by Economic Opportunity Act in 1965, the program is intended to overcome the effects of poverty on the lives of children. This programme aimed to provide educational, social, medical, dental, nutritional and mental health service to preschool children from a diverse population of low income families. This project was the first large-scale effort by the government to focus on young children of poverty in USA. (Morrison, 1980).

1.3 Importance of Early Childhood

Fueled by neuroscience, economic data and program evaluation results, children’s early years are emerging as a public policy focus around the world. Neurological and biological sciences have documented the malleability of early neuronal and biological development to environmental influence (Harvard Center on the Developing Child, 2010; Knudsen, Heckman, Cameron, & Shonkoff, 2006). Economic evidence suggests high returns to early investment in human capital (Heckman & Krueger, 2003). Evaluation science underscores that quality early childhood programs impact both early and later human development, in cognitive, health and socio-emotional domains (Aboud, 2006; Pence, 2008; Woodhead & Oates, 2009; UNESCO, 2010). In short, early human development and services and programs for young children and families are being seen as one of the most promising

approaches to alleviating poverty and achieving social and economic equity for the world community (Grantham-McGregor et al., 2007; Ulkuer, 2006).

How society benefit from early childhood care and development programmes is difficult to quantify, as such calculations are by nature imprecise and subject to a number to assumptions. However, these calculations provide a good indication of the value of investing in early childhood.

Researchers have shown that investing in early childhood development programme leads to the following:

- Increase human resource development (via better school achievement)
- Cost-savings and increased efficiency of primary schooling (lower rates of grade repetition and remedial education)
- Higher educational attainment
- Increased earning potential
- Reduction in juvenile delinquency and its associated costs
- Increased commitment to marriage
- Increased social mobilization and community involvement, and reduced social and economic inequalities in developing countries (Myers, 1992, Myers 2006)

Opinions vary concerning the extent to which pre-school programs have demonstrated long term benefits (Haskins, 1989) but there is enough evidence to suggest that such effects can be achieved with high-quality, intensive programming. The long term result of pre-school, centre based interventions must be interpreted in the light of the poor home and school environments that disadvantaged children continue to experience after pre-school. Results from programmes around the world provide evidence that “preschools experience helps low-income children narrow, but not close, the achievement gap separating them from more advantaged children” (Boocock, 1995).

Early childhood refers to the child from conception to age eight. This is standard and accepted definition by most professional educators. The term is also

used to refer to children who have not reached school age. It is the most rapid period of development in human life and the period when the brain develops almost to its fullest. This period provides the foundation for later living and learning. The term *early childhood education* refers to group setting deliberately intended to effect developmental changes in children from birth to the age of entering first grade (Gordon & Brown, 2004). The most recent definition includes the elementary years as well so we should define early childhood as from infancy through third grade (birth to eight years).

There are three parts to the phrase Early Childhood Care and Development. As it is currently used internationally, *early childhood* is defined as the period of a child's life from conception to age eight. There are two reasons for including this age range within a definition of ECCD. First, this time frame is consistent with developmental psychology's view of the continuation of children's development. Children below the age of eight learn best when they have objects they can manipulate, when they have chances to explore the world around them; when they can experiment and learn from trial and error methods within a safe and stimulating environment. At about the age of nine they begin to view the world differently. They can manipulate ideas and learn concepts mentally and are less dependent on objects. Thus in terms of learning theory, the birth through age eight time period presents a developmental continuation (UNICEF, 2001). Second, the international definition of early childhood includes the early primary years (6-8 ages) because of the importance of the transition for children either from home or from a pre-school programme into the primary school.

Care: In the 1980s, the term care was added to phrase early childhood development. This was in recognition of the fact that young children need care and nurturing. They need attention to their health and nutrition, to their evolving emotional and social abilities, as well as minds. The term care was chosen, rather than education, to move policy makers and program providers away from thinking exclusively in term of pre-schooling.

Development: It is defined as the process of change in which the child comes to master more and more complex levels of moving, thinking, feeling and interacting

with people and objects in the environment. Development involves both a gradual unfolding of biologically determined characteristics and the learning process. Learning is the process of acquiring knowledge, skills, habits and values through experience and experimentation, observation, reflection, study and instruction. Both the child's physical growth (health and nutritional status) are crucial in child's overall development. Thus learning is part of the developmental process. (UNICEF, 2001)

Learning begins at conception, from the moment of conception important developments occur that affect the brain, the physical body, and the chemistry of the child. These have an impact on that child's ability to learn, to thrive, to grow and be healthy.

The first eight years of a child's life form the foundation for all later development. Developmental psychologists have demonstrated that in the early years a child develops all the basic brain and physiological structures upon which later growth and learning are dependent. Emotionally and socially, as well the child develops many of the abilities upon which later social functioning is based. Attention to young children from the beginning can help to prevent later difficulties. Good nutrition, nurturing, mental stimulation and interactions for infant are the best preventive measure for avoiding developmental delays and disturbances. Development and learning occur as children interact with people and things in the environment. Therefore we can foster learning and development by making the environment more supportive. That involves creating a healthy environment and providing space and things and opportunities to help children to learn through play, whether at home or elsewhere. It involves enabling parents and other caregivers to encourage, nurture, stimulate, talk to and play with their children.

Children learn and develop better if they are actively involved. Physical, mental, social, and emotional development and learning are inter-related. Progress in one area affects progress in others. Therefore we need to pay attention simultaneously to physical development, mental development, social emotional development and spiritual development. A holistic and integral approach need to be taken.

Support of early development yields rich benefits not only in immediate ways but also overtime. All young children deserve to be cared for, nurtured and supported in their development. Unfortunately a great number of the world's children are at risk of delayed or debilitated development, due to poor nutrition, unsanitary conditions, poverty, difficult circumstances and untenable living situations. There are many form of intervention aimed at addressing the needs of children and family at risk, non formal parenting programs, preschool, home visit programs health education programs, health education programs etc. Children do not just grow in size; they develop, evolve, and mature, mastering ever more complex understandings of the people, objects and challenges in their environment. There is a general pattern of sequence for development that is true of all children. However, the rate of character and quality of development vary from child to child. Culture also influences development in different ways and the goals for children differ from culture to culture.

Early childhood care and development (ECCD) refers not only to what is happening within the child, but also the care that the child requires in order to thrive. For a child to develop and learn in a healthy and normal way, it is important not only to meet the basic needs for protection, food and health care, but also to meet the basic needs for interaction and stimulation, affection, security, and learning through exploration discovery (UNICEF, The State of The World Children, 2001)

ECCD activities are those that support young children appropriately and seek to strengthen the environment in which they live. ECCD includes working with parents to strengthen parenting skills, working with siblings and other family members to recognize the specific developmental needs of younger children, working to provide or strengthen day care options, developing preschools and other early childhood education programs that address the child's need in a holistic way and also support the community in its economic.

If we want to support young children and help them to thrive, then we need to understand many facts of their development, and also address the contexts in which they are living. Investing in early care and education is an investment that strengthens

the overall economy In fact; higher quality is connected with higher economic impact. An early childhood education jobs are the jobs for the future. Early childhood education is a service that people need that cannot be done electronically from any places in the world.

All children are born wired for feelings and ready to learn. Positive and nurturing early relationships develop healthy well- functioning brains. The baby's interactions with humans and environment shape the brain's architecture (Liu, Ribeiro, & Warner, 2004). Children learn best when their physical needs are met and they feel psychologically safe and secure, children construct knowledge, children learn through social interaction with other adults and other children, children learn through play, children's interests motivate learning.

Kuhl (2001) called infants "the best learners in the universe" and described that babies begin learning in the first months of life. Her studies have shown that infants are "citizens of the world". At birth and that early in life they can hear the differences between all the consonant and vowels used in any language.

Child development is a multifaceted, integral and continual process of change in which children become capable of handling more complex levels of moving, thinking, feeling and relating to others. Physical, mental, social and emotional development occurs as a child interacts with the surrounding environments of the family, the community and the broader society. Although individual children develop at their own pace, all children progress through an identifiable sequence of physical, cognitive and emotional growth and change. The early childhood development approach is based on the proven fact that young children respond best when caregivers use specific techniques designed to encourage and stimulate progress to the next level of development. (Young, 2002). Each child has an inner mechanism for monitoring growth that means each child is ready to learn at a given time. All children move through predictable stage of development.

The concept of "the whole child" is based on the accepted principle that all areas of human development (physical-motor, social-emotional, cultural awareness, creative, language and cognitive) are intertwined and mutually supportive. There are

several reasons to consolidate the different developmental areas when looking at children. The first is uniqueness of each child. Each child is a sum total of a multitude of parts and, as such is different from anyone else (Gordon & Brown, 2004). Early care has a decisive and long-lasting impact on how people develop, their ability to learn and their capacity to regulate their own emotions.

Our brains are continually re-shaping themselves to meet the demands of everyday life, even throughout adulthood. However, there are certain aspects of brain structure and function that do level off during development. For example, the number of neurons peaks even before birth; some 100 billion are formed during just the first five months of gestation. Recent evidence suggests that new neurons are produced throughout life, though far less rapidly, and probably in numbers sufficient only to replace those that gradually die off (Markezich, 2001).

The human brain has 100 to 200 billion neurons that store and transmit information, many of which have thousands of direct connections with other neurons. During the first two years, growth of neural fibers increases at an astounding pace. The human brain is the most elaborate and effective living structure on earth today. Early experiences mold brain organization. During the early years, the cerebral cortex is more plastic than at any time of later life. Stimulation of brain is vital during the rapid growing period. At birth, the brain is nearly 30 percent of its adult weight: by age 2, it is 70 percent, and at 6 years 90 percent (Berk, 2004).

The brain seems to operate on a “use it or lose it “principle. At birth one has about 100 billion brain cells and 50 trillion connections among them. With use these cells grow branches, called dendrites; they reach out to make connection with other cells. With impoverishment, you may lose the dendrites. Over the first decade of life, the number of connection begins to decline, and by the teenage years about half have been discarded and this number will remain relatively stable throughout life (Gordon & Brown, 2004). The human brain has a remarkable capacity to change but timing is crucial. A child’s experience (both positive and negative) helps to shape the brain, affecting to some degree how he/she thinks, feels and relates to others throughout his/her life.

The importance of brain development before the preschool period should not be overlooked, by the age three the brain is 80% of adult size. Children may never reach their potential if their neural circuits are not stimulated before they enter kindergarten (Charlsworth, 2004). So quality preschool or daycare programs are essential for small children. It is possible that quality preschool programs may be able to correct some of the damage done during the infant and toddler periods.

To help children's brain development and well being and to let them grow we should not harm them. However prevention is best method and when a child needs help, we should intervene quickly and intensively. The brain is poorly designed for formal instruction. It is designed to learn what it needs to learn to survive (Gordon & Brown, 2004). It is now clear that what a child experiences in the early years of life profoundly influences how his brain will develop and how he will interact with the world throughout his/her life.

While a child's brain continues to develop throughout his or her life, recent studies have shown that a child's most explosive rate of brain growth and learning is from birth to age five. Positive stimulation of a child's brain in the early years lays the foundation for the child's future ability to learn, develop language skills, and to interact with others. We are faced with two conflicting realities: ever increasing numbers of mothers in the workforce and the need for children to have quality experiences in early life.

Providing quality early childhood care programs is challenge for the 21st Century. Our children are 100% of our future. The term *early childhood development* (ECD) refers to comprehensive approach to policies and programs for children from birth to eight years of age, and for their parents and caregivers. Its purpose is to protect the child's right to develop mental and physical potential (Thipathi,2002).

Early childhood programmes are the foundations and models of democracy because this is where children become aware for the first time of being part of a collective-an organism which is beyond their own world (Pande,2009). The preschool has emerged as a very important factor in improving child development and the welfare of the family and community preschools are an important educational

resource in the community. They provide many benefits to the lives of individual children, parents, family's communities and other community institutions. Parents believe that the preschool gives their children a good foundation in life (Woodhed, 2009).

1.3.1 Importance of ECD Programs

The United Nations Children's Fund (UNICEF) provides a comprehensive definition of early childhood development (ECD). It is, "The acronym ECD refers to a comprehensive approach to policies and programs for children from birth to eight years of age, their parents and caregivers. Its purpose is to protect the child's right to develop his/her full cognitive, emotional, social and physical potential. Community-based services that meet the needs of infants and young children are vital to ECD and they should include attention to health, nutrition, education and water environmental sanitation in homes and communities. The approach promotes and protects the rights of the young child to survival, growth and development" (UNICEF, Why invest in ECD?, 2001).

Many educators and researchers view early childhood education as beneficial to children's cognitive and social development. Every child is a unique person with an individual temperament, learning style, family background and pattern and timing of growth. There are, however universal, predictable sequences of growth and changes occur during the first 8 years of life. As children develop, they need different types of stimulation and interaction to exercise their evolving skills and to develop new ones.

Through the preschool, acquire various types of knowledge and skills about ECD e.g. the need of children and how best to provide for them ; how children grow and develop, child-centered learning methods, importance of play in growth, development and learning, the management and organization of ECD centers, skills for self-growth and development, community mobilization.

After ECD training teacher can have better understanding of how children grow, develop and learn, they will be able to handle the learning and teaching process in the ECD centers effectively through the use of child centered methods. They will be more confident about and better skilled in providing for the needs of children, mobilizing community activities and supports, and understanding the self.

They can acquire more knowledge and skills about managing ECD centers, more self awareness and insight into their own personalities, and will be able to interact better with preschool children, their own families, parents and community.

A child's ability to think, form relationships, and live up to his /her full potential is directly related to the synergistic effect of good health, good nutrition, and appropriate interaction with others. These inputs lay the foundation for healthy cognitive and emotional development, which translate into tangible economic returns. ECD project research has proven that children who participate in well-conceived ECD programs tend to be more successful in later school, are more competent socially and emotionally, and show higher verbal and intellectual development during early childhood than children who are not enrolled in high quality programs. Ensuring healthy child development, therefore, is an investment in a country's future workforce and capacity to thrive economically and as a society (World Bank, 2001).

The benefit of investing in early childhood development (ECD) is by now well known. Indeed many studies have proven long term positive outcomes for investment in ECD, based on both economic and social measure (Pande, 2009).

Investing in every child at an early age is an investment in human and economic development for all. Young children who are well nurtured and cared for do better in school and develop the skills to compete in a global economy. Awareness of child development is increasing in Developing countries (Engle, et al., 2007). According to Young (1996) there are five reasons to invest in young children: "to build human resources in a scientifically proven manner, to generate higher economic returns and reduce social costs, to achieve greater social equity, to increase the efficacy of other investments, to help mother as well as children". Join with children as human beings to reveal multiple ways (Viruru, 2001).

The main objective of ECD programs is to create a suitable environment for the holistic development of the child; for promoting his/her physical, emotional, intellectual and social aspects, keeping in view the feeling of confidence and development of basic life skills as well as feeling of appreciation about nature and different forms of art is ensured for every child. Growing in independence, learning to

give and share, as well as receive affection, earning to get along with others, developing self-control, beginning to understanding and control the physical world. “Early attention to the well-being of the world’s children, especially in their earliest years, is the most direct route to assuring their future and of all the generation come” (Bellamy, 2001). This quotation has been proved by much research done in the area of early childhood development.

Cotton and Conklin’s (1989) research on early childhood also supports the above quotation. Once out of school, young people who had attended pre-school continue to make a better life than those who had not. They were found to have higher employment rates, better earnings a lower incidence of dependence on welfare, better relationship with family members and fewer antisocial acts.

Integrated early child development programs may be the single most effective intervention for helping poor children, families, communities, and nations break the intergenerational cycle of poverty. But to be successful and sustainable, such programs must be an integral part of countries’ overall strategy for developing human capital. A number of evaluations in developing and developed countries demonstrate the short and long term benefits of these early intervention programmes-with the strongest and most dramatic benefits for the most disadvantaged children including poor, disable and children from disadvantaged family (Pande, 2009).

Although the scope and content of a child development policy will vary with the needs and resources of each country, certain program goals are recognized as universal: giving economically disadvantaged children the same chance to develop as their more fortunate peers. More than thirty years of experimenting with early intervention programs has shown that there is no quick way to optimize the growth and development of a child (Eastman, 2009).

Supportive parenting, comprehensive health care (including clean water and sanitation), developmentally appropriate schooling, and good child care practices must persist throughout childhood, and program needs must be tailored to community requirements and budgets. What is clear is that we need to reassess the economics of early child development programs. We need to review the roles of NGOs, the government, and the private sector. And we need to identify alternative sources of financing to fund early child development programs.

1.4 ECD in Nepal

For many centuries, until the 1950s Nepal remained virtually isolated from the outside world. In Nepal, formal school education has been in the process of development only since 1950. In the early 1950s the total literacy rate was about 2%. Only after 1951 primary education started to develop in Nepal. Early childhood education was the most neglected aspect in the whole education system of Nepal.

There was “go to school” slogan on the early 1950’s in Nepal. It was the outcome of democracy that brought an awakening to the need for education. The result was the mushroom growth of schools in varied disciplines with an open-door policy, which brought about a fad among citizens of diverse age and both sexes to rush into the schools. The literacy percentage increased from 2 percent to 13.0 percent within the past two decades. After five decades Nepal’s youth (15-25 years) literacy rate is only 79 percent (Male- 85 % and Female-73%) and adult (15+) literacy rate is 56.5(Male-70.3 %, Female- 43.6%) and slogan is “Invest in ECD for the future” (UNESCO, 2007).

Twenty percent of Nepal’s children are not enrolled in school and the figures are higher for girls, *Dalits* and other disadvantaged groups. Those children who start schooling are poorly prepared, and schools are equally unprepared to respond to their needs. Attendance is low, failure is frequent and repeat and dropout rates are high, especially in the first two years (grade I and II). Problems associated with the transition to school require serious attention. Another particular problem is the number of underage children that, lacking care at home, accompany older siblings to school, swelling the population in already overcrowded classrooms during certain season (Save The Children, 2003).

Today the Nepalese education system is rapidly expanding and striving to meet the needs of all children. The government has yet to enact laws for schooling. Early childhood development has for long been given less importance than it deserves. Care of young children has not been given enough attention, especially within the family and home. Generally, early childhood development (ECD) programs in Nepal are known by various names such as Shishu Shyahaar (Early Childhood Care), Shishu Shikhya or Bal Shikchya (Early childhood Education), Shishu Shyahaar

Kendra (Child Care Center), Nursery School, Kindergarten School and Purba Prathamik Vidyalaya, (Pre-primary School)(Acharya,2002).

In Nepal, early childhood services not only provide infants and toddlers with good care; it also frees young girls from looking after their younger siblings and opens up opportunities for them to attend or devote more time for school. It also frees mothers for entry into labor market. It creates new job opportunities for people providing household daycare or involved in home-visiting programmes. The child benefits from receiving basic services as well as from playing, singing and dancing. The family benefits from the added income. The community benefits from additional jobs and workers for the labor market (Varma, 2009).

In Nepal, for the first few years, children are usually cared for by family members. By the time children start walking they are considered old enough to be left in the care of older siblings. Children rarely receive direct instruction in social behavior but are expected to learn by imitation.

Though preschools were started in 1950 with the establishment of a Montessori school in Kathmandu and Bal Mandirs in some districts, its importance has been realized only lately (Rizal, 1987). In 1962 Nepal Children's Organization (NCO) Bal Mandir imparted child care education in the district headquarters. Credit goes to this organization for taking the ECD program outside the Kathmandu Valley for the first time. With the expansion of private schools during the 1980 and thereafter, ECD program was introduced by private schools in urban and semi-urban areas of the country. Children from families who could afford the cost of private schools benefited from exposure to the early childhood development programs. In the middle of 1980s The Plan International provided support to some ECD centres outside the Kathmandu valley. In 1991/1992 Basic Primary Education project started ECD program in community schools. Education below the primary grade falls outside the formal education system. There are pre-schools in the private school of urban areas. In rural areas a large number of underage children enroll in grade I classes of regular primary schools because there is no pre-school classes or ECD programs in the Government schools. The leading NGO in pre-school education is the Nepal

Children's Association, which operates Balmandir (child centre) in some districts of Nepal (in 1986/87). In large urban centers, particularly Kathmandu, there has been an increasing demand for English medium preparatory schools. In 1984 there were 153 such pre-primary schools with nearly 15000 children and 700 teachers (almost two third of which are women). Now this number has increased. Almost 4004 private schools in Nepal have pre-primary classes. Most of these private schools have three sections: Nursery, Lower K. G. and Upper K. G. Although data on the pre-primary programs of private schools are not available, an estimate based on 30 children per section would come to about 360,000 enrolled children (The EFA Nepal, 2000).

Although these developments are significant, the situation where Nepal stands now in terms of education status is still far from the status in developed nations. About 50% of the over 6 year population is still illiterate and 20 percent of primary age children are still not enrolled in school.

Table 1: ECD Centers in Kathmandu from 2006-2008

Kathmandu Valley	2006	2007	2008
Community based ECDs	3	46	46
Government School's ECDs	36	142	186
Private School's ECDs	693	711	687
Total	732	899	919
Total ECD centre in Kathmandu Valley (Including Patan and Bhaktapur)	1335	1515	1627

Source: (Education, 2008) p.60.

Table 2: ECD centers in Nepal from 2006- 2008

Nepal ECD centres	2006	2007	2008
Community based ECD	229	6332	6332
Government School ECD	5835	10191	13691
Private School ECD	3313	3413	3636
Total	9377	19936	23659

Source: (Education, 2008)

Table 1 and 2 show the increasing number of ECD centers in Kathmandu Valley and the whole of Nepal.

The latest statistics indicates that there are over 24000 school based and community based ECD centers in the country (Flash report 2007). Government of Nepal started taking interest in ECD programs at the implementation of the country's Seventh Plan (1987-1992). In the Seventh Plan, the government realized the need for appropriate services for children from the time of conception. However, the government has not developed specific or concrete plans and policies other than encouraging families and communities to take initiative in delivering child care services. In the Eighth Plan (1992-1997) the government reiterated the statements made in the Seventh Plan. In the Ninth Plan (1997-2002) the government developed some specific plans and policies for the expansion of ECD programs in the country. The Ninth Plan had aimed to establish 10,000 pre-primary schools under the Basic and Primary Education Project (BPEP) but the implementation number had been reduced to 5700. The achieved number is 2915. The Tenth Plan (2003-2008) has targeted to establish 13,000 pre-primary schools (Govt. of Nepal, 2003).

Despite increased attention over recent decades to early childhood development services in Nepal by the Government, the private sector and NGOs, less than 14 percent of the children currently enrolled in grade one have been exposed to any kind of early childhood program. Parenting programs, similarly, reach only a small percentage of families. Early childhood field program supported by the Save the Children in Nepal consists of linked parenting programs and community-based ECD centers. Operated entirely by local partner NGOs, parenting programs, which have reached over 20,000 parents in the last three years, are the usual entry point for Save the Children's ECD work. Between 1998 and 2002, Save the Children supported the start-up of more than 200 ECD centers, providing opportunities for about 13,000 deprived 3 to 5 years-olds in 12 districts (Save The Children, 2003).

The National Education Information system does not report the status of ECD data. The statistics have been quoted from the Basic and Primary Education Project (BPEP). They have conducted a survey of 4,168 schools in 23 districts. According to

that survey, the gross enrolment ratio of ECD programmes including public, private and community programmes was 8.07%. This survey did not include Kathmandu valley and other major city areas.

Table 3: Enrolment trends in ECD/PPCs by sex, 2004-2006

Sex	2003	2004	2005	2006	Average annual growth (03-06)
Girls	113653	235512	426062	264890	32.6
Boys	143468	276639	496495	289094	26.3
Total	257121	512151	922557	553983	29.2

Source: (School level educational statistics of Nepal, 2006)

The Government's recent involvement in ECD as key component of basic education is in part a reflection of the international trend to give more attention to young children's development, but it is also tied to the very real need to get underage children out of grade one. Because of the lack of alternative care for pre-school age children, many overburdened parents send them to school along with their older siblings when they are three or four, and these results in extremely overcrowded first grade classrooms. By the beginning of 2002 the Department of Education had started more than 2000 Bal Bikas Kendra (ECD centers) and it plans to establish 5,700 centers by 2005 (MOES, Nepal, 2002).

The Research Centre for Educational Innovation and Development (CERID) has conducted an experimental study entitled "Pre-school Education for Better Nutrition: An Early Childhood Development Approach" from 1991 to 1994. This was a major comprehensive research study conducted in the field of early childhood development in Nepal. Save the Children US (SC/US) is working in Nepal for survival, growth and development of children. It has launched various programs related to child development since 1986. UNICEF & SC/US both have mandates to bring about lasting positive changes in the life of children. Since October 1996 they have collaborated to initiate and run a three-years "Early Childhood Care and Development" (ECCD) project. The implementation of this project began in January

1997. At the initial phase, the project had covered five districts, i.e. Gorkha, Siraha, Nuwakot, Kailali and Kanchanpur. After phasing out the program from Gorkha district in 1998, it is now limited to remaining four districts. In Siraha and Nuwakot, SC/US has directly implemented the ECCD project with the help of UNICEF.

Bartlett, Arnold and Sapkota's study: "What's the Difference .The impact of Early Childhood Development programs" (Save The Children, 2003) conveys the voice of many Nepali parents and also conveys their satisfaction with what is attempted in support of their children.

A study on Shishu Kakshya (ECE) conducted by CERID showed that there was a lack of adequate instructional materials in the classes and the teachers were not adequately trained. Besides ECE classrooms were crowded and have inadequate physical facilities. In most of the cases teachers were not using various techniques for monitoring and evaluating child's overall growth and development. Most of the ECE programs lacked effective focus on health and nutrition needs of the children (Bajracharya and Shrestha, 1997).

In Nepal conducting research studies in the field of early childhood development and education is very rare. Most of the ECD programs are being implemented without the support of carefully conducted research information. So it is difficult to understand the reason for success or failure of a particular ECD program.

A paper entitled, "Current Policies on Early Childhood Development in Nepal" and another paper, "Early Childhood Development: What is it? What are the Recent Trends and what are the Challenges Confronting its Development in Nepal?" by Dr. Kishor Shrestha, discuss the recent trend and challenges confronting the development of ECD in Nepal. He also emphasized the need for more research in the area of ECD (Save the Children, 2003).

In Nepal child mortality is high (55 in 2007 -140 in 1990) malnutrition is common, sanitation is poor and few children receive formal education so the situation of children in Nepal is mixed somewhere good but in some cases not good.

1.4.1 Types of ECD Centers and Pre-primary Classes in Nepal

There are two types of ECD programs:

- Community based and school based which are initiated by government, NGOS/INGOS and private.
- Pre-primary classes attached to primary schools

One year pre-primary classes (Shishu Kakshya) are run by the government and local government bodies and the aim of these classes are to prepare the child for primary class (Grade I).

In urban areas of Nepal English-medium pre-schools are predominant. There are many private nursery and kindergarten schools with high fees, in urban areas.

1.4.2 ECD Curriculum in Nepal

Department of Education, Early Childhood Development Section has prepared a curriculum handbook for all private schools, community schools and early childhood development centers which are conducting early childhood development programme for the children of age three to four years.

This curriculum handbook is divided into three parts: a. introduction, goal, ECD environment b. curriculum- fundamental learning area and subject-wise area c. theme-wise activities

Table 4: Age-wise activity distribution for childhood development in ECD centres

S.N.	Area	3years	4years
1	Acquisition and establishment of health habit, moral norms and values and life skills development	30mins.	40mins.
2	Free games	60mins.	45mins.
3	Linguistic expressions	45mins.	60mins.
4	Planned social activities	30mins.	45mins.
5	Gross motor development	45mins.	30mins.
6	Planned learning activities	30mins.	60mins.
	Total time	240mins. (4 hrs)	270mins. (4½ hrs)

Table 5: Daily time schedule recommended for an ECD centre

S.N.	Activities	Time
1	Out-door games	15mins.
2	Physical games and socialization	15mins.
3	Group work	30mins.
4	Planned activities	15-30mins.
5	Personal games	15mins.
6	Group planned games/activities	20mins.
7	Health moral messages/rest	10mins.
8	Lunch and toilet	-
9	Music and role playing	30mins.
10	Rest	10mins.
11	Planned activities	15-30
12	Personal free activities	25mins.
13	Group planned activities	10mins.
14	Musical expressions	10mins.
15	Classroom management	15mins.
16	Personal preparation to return home	10mins.

Source: (Department of Education, 2006)

According to age children have to stay in the centre or Nursery, LKG class for a minimum of 4 to 4.30 hours and centers or classes must be conducted for 32 weeks in a year (6 days a week-Sun day-Fri day, 10 A.M-2/3 P.M.).

Part three explain the theme-wise activities e.g. me and my family, my place, festivals, environment, transportation, our identity (about nation). The goal of ECD curriculum is to make children capable in all areas of development.

1.4.3 Patterns of Operation

Both private and government ECD centers are generally open from Sunday to Friday. Most ECD centers and pre-primary schools are open from 10 a.m. to 3:00 a.m. While some private ECD centers and Nursery schools are more flexible. Beside National holidays there is winter vacation of 45 days and summer vacation of 15 days

in the government schools of Kathmandu valley. In private schools this winter and summer vacation also depends on their own calendar.

In the government schools the pre-school teachers are paid salaries on government approved scale but it is very low. Pre-school (Shishu Kakshya) teacher is known as helper in government school. In private schools the salary of pre-primary teacher varies depending on location, ownership and quality and standard of school.

School Based Early Childhood Development (SBECD) and Community Based Early Childhood Development (CBECD) centers are being operated in three modes: through Government initiatives, on INGO/NGO Partnership and on government-INGO partnership.

1.4.4 Government /national policies for ECD

The Constitution of Nepal (1990) and The Child Rights and Welfare Act, (2008/1991) have made clear provision to safeguard the Right of the Child. The BPEP II (1999-2002) has developed ECD programs to ensure flourishing of inherent potentialities of a child. The emphasis of the program is to provide activities for holistic development of the child. The Government of Nepal also recognized the important role of various organizations. BPEP II has implemented community based ECD program in 42 districts (out of 75 districts) the targeted community-based ECD centers was 5700 by 2004. In the tenth Five Year Plan (2003-2007) it was planned to establish further 13000 centers for the plan period.

The Department of Education (DOE) has developed and implemented community based ECD program since 1999. DOE is responsible to lead and co-ordinate different aspect of activities on ECD program for the holistic development of the child (age 3-5 years) (Shrestha, 2002).

Education Commission constituted at different time since 1954 laid emphasis on the need for providing basic and primary education for all citizens. However since that period the basic policy has always remain the same. After the restoration of multi-party democracy in 1990 educational development efforts have become consistent compare to previous decades. Primary education is free from 1975

(Grade 1-3) and from 1981 it was free up to Grade V. In 1992 the Nepal government declared free education up to Grade 10. Though it is called free parents have to buy books and pay some charges to the school and it is not possible for the poor people.

The total financial cost of Basic Primary Education Project II (BPEP II-1999-2004) was jointly supported by DANIDA, IDA, NORAD, EC, FINIDA, UNICEF and JICA. The total donor financing under the five year programme implementation Plan was US\$106 million. (CERID, 2003, p. 67)

In Nepal the education budget has always been less than adequate.

Table 6: Percentage of total budget for education (1985- 2003)

Year	1997-1998	1998-1999	1999-2000	2001-2002	2002-2003
Percentage of Total Budget	13.76	12.5	13.2	14.0	15

Source: (CERID, 2003)

Table 6 shows the increasing budget for the education sector of Nepal. The data shows a steady increase in budget allocation for education. There has been a growing trend in international assistance to the education sector in Nepal.

On the whole, the government policy for the development of ECD program in Nepal is favorable. The government's commitment to the EFA goal of "expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children" is reflected in the Strategy Paper for ECD in Nepal 2004 (CERID, 2009). The National Plan of Action targeted to establish 74000 ECD centers by 2015 and EFA 2004 -09 expect to establish 13,000 ECD centers in the programme period. A rapid expansion of ECD centers will be required to meet this target. (Education, Education, & Nepal, 2004).The latest statistics indicates that there are over 24,000 school based and community-based ECD centers in the country.

In 1999, an Early Childhood Development Section was established under the Department of Education of the Ministry of Education and Sports to look after the

ECD development needs in the country. Department of Education/ECD Section consists of an Under Secretary (Section Chief) and two section officers.

In 2005 there were 1,079 communities and school based Early Childhood Centers directly supported by other agencies than the government (UNICEF, Save the Children US and Norway, Plan, World Vision, ETC and *Seto Gurans*).

Total funding for Early Childhood Development programmes in 2005 by four major agencies and INGOs donors (in US\$, the contributions of smaller NGOs and Community Based Organizations are not accounted for).

Table 7: Name of the INGOs and amount of donation in US \$

INGOs	Amount of donation in US\$	Remarks
Plan International	1,029,725	-
Save the Children US	179,623	-
UNICEF	395,702	-
Save the Children Norway	95,173	-
Total	1,700,223	The proportion used for ECD centres is not known

Source: (UNESCO, 2006)

At the national level, a National Early Childhood Development Council was formed in 2005 and is chaired by the Ministry of Education and Sports with members from Ministry of Health, Local Development, Women Children and Social Welfare and UN agencies and NGOs. This Council provides a broad base to harmonize ECD activities and to ensure coordination among national and local level programmes. At the district level, District Child Development Boards (DCDB) has been constituted in some districts chaired by District Development Committees. As per the 2004 ECD strategy, these Boards will be formed in all 75 districts in the country. The board is responsible to ensure community participation and to coordinate with local Government bodies, I/NGOs and local authorities and to raise funds and providing support to construct ECD centers.

At the village and municipality levels, the Village or Municipal Education Committee will be responsible to coordinate the child development activities at the local level. The Committee will also look at pre-primary classes carried out in public and private schools” (UNESCO, 2006).

1.4.5 Recent National Policies and Reforms

Pre-primary education is available only to a small minority of children exclusively in urban settings. All pre-primary schools are private and charge fees. The Basic and Primary Education Project is working to broaden the network of pre-primary educational institutions. Pre-primary education is not currently part of the formal education system. A very limited percentage of children have access to private, fee-paying pre-school establishments exclusively in urban areas. Almost all of the 4,004 private schools in Nepal have pre-primary nursery and kindergarten classes. Most of these private schools have three sections: Nursery, LKG and UKG. The Basic and Primary Education Project has included the promotion of early childhood activities on its agenda. (Shrestha, Bajracharya, Aryal, Thapa, & Bajracharya, 2008).

At present more than 7,023 community-based ECD centers are in operation across the country, which are receiving technical support from the Department of Education and District Education Offices through Resource Centers. These centers are not enough to accommodate all children between 3 to 5 years of age. Presently, under BPEP II, the Government is providing support to community based ECD centers for facilitator’s salary (Rs. 13,000 per year), establishment costs (Rs 2,000 each), basic material costs (Rs 1,000 each) and a maximum of Rs 27,000 to match the fund collected by the community. BPEP II also bears the cost of basic and refresher training for facilitator and orientation Programmes for the management committee members. However, many centers have not yet been able to raise the fund to match the entire amount provided to them by the government (UNESCO, 2006).

The National policy has aimed to construct 6,000 new ECD centers within the school Year of 2005/6. The government reports that they will achieve their target construction. The long term plan is to have a total of 13,000 centers by 2007 and 74,000 by 2015.

Unfortunately, the DEO does not have enough resources to fully support the expansion. For example, the facilitator's training has been reduced from 16 days to 8 days. Matching funds are also not available for all new centers since the expansion of 6,000 new ECD centers were not budgeted for in 2005/06.

Learning materials have been purchased through the district education offices and are being distributed to the ECD centers around the district. Special trainings are given to make learning materials out of locally available materials. Many NGOs and partners are participating and encouraging this practice of utilizing locally available materials. Child psychologists and ECD specialists are raising serious concerns about the use of heavily loaded cognition based curriculum and content oriented pedagogy in such classes.

Most private schools are neither able to hire or develop ECD experts to work in such establishments, nor has the government been able to cater to the needs of child development.

1.5 INGOS and NGOS Working with ECD Program in Nepal

The Government of Nepal so far implemented the education for all program with financial support from different INGOS and NGOs like UNICEF, UNESCO, JICA, USAID, World Bank, World Vision, Plan International, Seto Gurans, Divyankur, Save the Children Norway, Save the Children US, etc.

With a scarcity of research studies in the area of ECCE the present study was undertaken to investigate the following objectives.

1.6 Objectives

- To survey the various ECD programs, both private and government school, operating in Kathmandu district, (Kantipath, Lajimpat, Marajgaunj, Chundevi, Samakushi, Tokha, Jhor, Sangla) of Nepal.
- To assess the quality of the selected pre-primary schools in relation to the developmental needs of pre-school children.

- To compare the overall development of children who were participating in various pre-primary school programmes with those who had not attended any pre-school programme
- To investigate the perspective of principals, parents, and teachers regarding the ECD program.

1.7 Operational Definitions

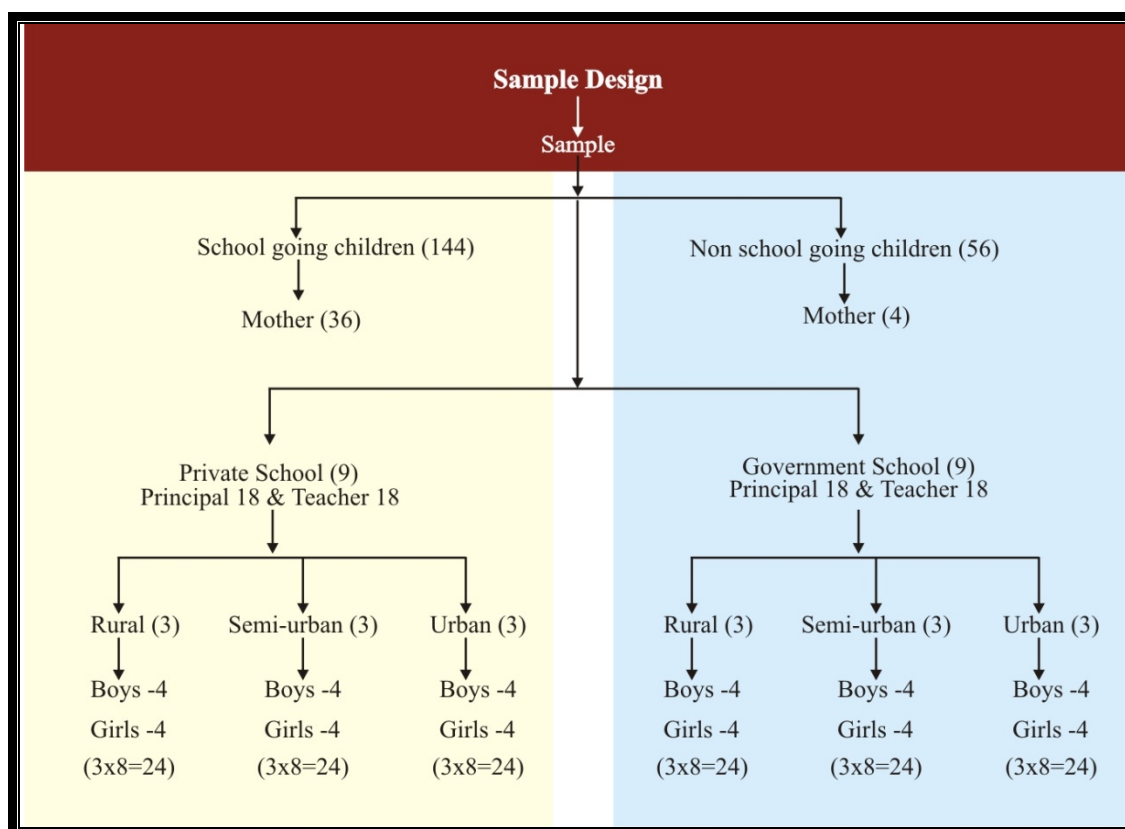
Pre-school children are children in the age group 48-50 months who were going to a pre-primary programme or those who had not attended one at the time of the study.

Pre-primary school children were children aged 48-50 months and were attending a pre-primary school regularly in Kathmandu district of Nepal.

Non- school going children were children who had no experience or exposure to any kind of early childhood development program.

2. METHODS

The first step in investigating the Early Childhood Development programmes in Kathmandu District involved conducting a surveys of various schools and community based Early Childhood Development (ECD) programmes. A detailed list of private and government schools in Kathmandu district was obtained from the District Education Office (DEO) Kathmandu. Survey of schools was undertaken from the list and selection of pre-schools was done. Identification of school going and non-school going children of age group 48-50 months was the next step for the study. Identification of principals and teachers & parents was also undertaken.



2.1 Sample

2.1.1 Survey of School

The list of schools was collected from District Education Offices (DEO), Kathmandu in order to identify the preschools from rural, semi-urban and urban area of Kathmandu district. Eighteen schools were selected from urban, semi-urban and

rural area using the purposive sampling technique. Only those schools which were running pre-primary classes were included in the sample.

Children are the most important asset of any country and the most important human resource for overall development of the country. Schools are an external medium that helps children acquire new knowledge and skills to grow into productive and capable citizens. Joyful and happy environment promotes diversity in learning. The school plays a crucial role in the development of cognitive, linguistic, social, emotional and moral function. It has a profound influence on children, their families and the community.

A review /survey of facilities for young children indicate that there are two kinds of Early Childhood Development (ECD) or Early Childhood Education (ECE) programmes in Nepal. They are school-based pre-primary classes (PPC) and community -based centres. The ECDs run by the community and community schools (Government schools) include one year programme and the community based ECD programme supported by NGOs include two year programmes. Almost all the private schools in Nepal run three years programmes- these are nursery, lower kindergarten (LKG), and upper kindergarten (UKG). Government schools also run pre-primary classes on their premises. Community participation in the development of early childhood development programme has been the strategy of the government since the Seventh Plan (1987-1992) (Flash I Report 2008/09). Accordingly, provisions were made for opening pre-primary schools by communities, NGOS, groups or individuals. We can now find a prolific mushrooming of private kindergartens especially in Kathmandu.

According to Flash Report 2010/011 there are 31,089 ECD/PPC s in the country, 26,733 (86.1%) ECDs are running as community-based ECDs and community school based ECD/PPs. Thus rest 4316 (13.9%) of the ECD/PPCs are run by private schools (Nepal, 2010) According to Flash Report 2008-09 (Government of Nepal, 2008), out of the 23,659 ECDs/PPCs (Early Childhood Development/Pre-primary class) in the country, 20,023 (85%) are running as community based ECDs and community schools based ECDs/PPCs. The rest of the 15% (3636) centres are

under the institutional (private) management. According to Flash report 2009, out of 29,089 ECDs/PPCs, 24,773 (82.5%) ECDs and PPCs are running as community-based and community school based and rest 4316 (17.4%) ECDs/PPCs are run by private schools (Flash I Report 2009/10, 2009). According to *Saichyik Manjari*, 2010 (published by District Education Office, Kathmandu) there are a total of 1294 schools in Kathmandu District and among the 1294 only 300 (23.1%) are Government schools while the majority 994 (76.81%) are private schools. All the private schools have PPCs (994=7. %), while the 182 Government schools are running School based ECD centres. Of the 182 government schools, 176 schools have one centre each and 6 have 2 centres, making total of 188 preschool centres. There are 76 (6. %) community based ECD centres. Thus the gross ECD centres in Kathmandu District are 1258 (994+188+76=1258). ECD programs in most developing countries are not always planned and implemented with a clear understanding about children's holistic development. We may also mention here that urban poor living in slums and semi-urban settlements still remain un-reached by any early childhood development programs.

Appendix A: Number of primary, lower secondary and secondary school Kathmandu District, 2005 -10 .

Appendix B: Total number of ECD/ PPCs centres by the year 2009/2011

Out of the total of 29089 ECDs/PPCs, 24,773 (82.58%) ECDs and PPCs are run by the community and government schools while 4,316 (17.42%) ECDs/PPCs are run by private schools.

2.1.2 Selection of pre-schools

Accessibility and political unrest in the country during the period of data collection made selection of sample schools difficult. Using purposive sampling techniques, 18 schools were identified from the rural, semi-urban and urban areas of the Kathmandu district from the DEO bulletin (Saichik Mirmirme. 2004). Among eighteen schools, nine were government schools and nine were private schools. Of the groups of nine, three were from rural, three from semi-urban and three from urban

areas. After collecting the list of schools from District Education Office (DEO), Kathmandu, I tried to contact the principals by telephone. Only a few principals were available on the phone because of the internal conflict in Nepal. This was because they were often threatened through the telephone. When contact was difficult I had to visit the schools directly and show them my campus teacher identity card and explain the purpose of the visit. To fix a meeting with the principal and to get approval for using the school as a centre for data collection was an arduous task during the conflict period. During that time, many suspicious people used to enter the schools and ask for a donation in the name of political parties and if a donation was not given, then the management and the staff were threatened in various ways (especially in private schools). It was even difficult for the schools to find out if such people were genuine members of a political party or fake ones.

I visited more than 20 government schools and about 25 private schools then select 18 schools for the study.

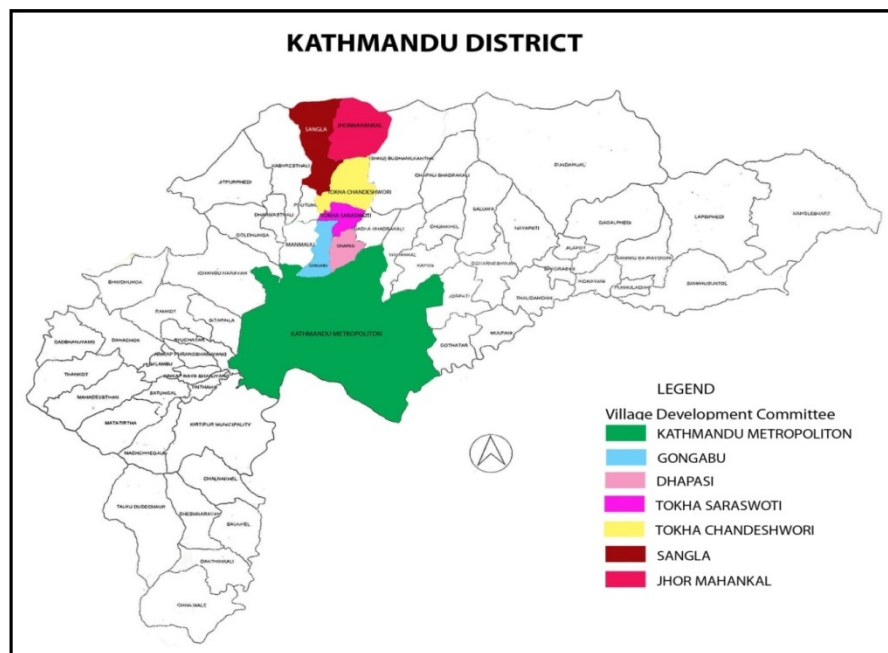
Because of the conflict (during 1996-2006) between government forces and the Maoists, Nepali people were living an insecure life. Many private schools were targeted, physically attacked and even forced to close in many rural, semi-urban and urban areas including Kathmandu valley. Maoists have also frequently targeted teachers and students from government schools (mostly outside the Kathmandu Valley) and taken them hostage. Further, school managements and all the teachers have been forced to make donations during that period. Department of Education information indicated that by the end of the year 2005, five educational personals, 11 pupils, and 182 teachers have been killed. (EFA-2006)

Because of all these reasons and political unrest in the country, selection of sample schools was also difficult. Table 2.1 shows the total schools selected as sample from different areas.

Table 8: Sample Size

Area	Government Schools	Private Schools	Total
Rural	3	3	6
Semi- Urban	3	3	6
Urban	3	3	6
Total	9	9	18

Figure 4: Map of Kathmandu District and Study Area selected



2.1.3 Selection of pre-primary school children

From each school eight children, four girls and four boys aged 48-50 months were selected using purposive sampling method. The selection was done with the help of the class teachers and principals. Nepali Calendar is based on Bikram Sambat (B.S.) and is approximately 56 years 8 months ahead of A.D. The Bikram Sambat calendar was started in 57 B.C. by King Bikramaditya in India. The number of days in a month varies from month to month and may not be the same in different years. The days in a Nepali month range from 29 to 32. I converted all the date of births of the children to the western calendar. Where ever there were discrepancies, parents were

contacted to get an accurate date of birth for each child. There were some problems in getting accurate date of births for children.

In Nepal pre-primary school age is 3-5 years. For my study children who had attended a preschool programme for atleast 6-9 months regularly were identified. Therefore children who were 48 to 50 months were selected from each school and they had to be regular in attending school. The attendance should have been more than 75% from the time of admission in school. To match this sample of school going children non-school going children in the age group 48-50 months were also identified.

During 2006-2007, there were many *banda's* (strike of Maoist). In *banda* schools were always affected. Schools were closed for many days, so to visit school and fix the sample children were a tough job during that period. It was also difficult to get the sample children of age 48 to 50 months in rural areas because; the parents did not send their children to school at a young age.

Table 9: Children selected from each School

Area	Government School children	Private School children	Non- school going children	Total
Rural	24	24	15	63
Semi-urban	24	24	35	83
Urban	24	24	6	54
Total	72	72	56	200

2.1.4 Selection of Non School Going Children

Two hundred children formed the sample of the study. Among them 56 children were non- school going and they had no experience or exposure to any kind of early childhood development programs. To get the sample of non school going children from rural areas, the researcher visited the school in the month of Baisakh (April 2nd week) because this is the month for new admissions.

Most of the non-school going children were from semi-urban areas. In rural areas, it was difficult to find children of age 48-50 months who were not going to preschool and visiting homes was also a difficult task during the conflict period. In semi-urban areas (outside the ring road of Kathmandu), because of Maoist insurgency, it was observed that the people from rural areas (Outside Kathmandu valley) had also migrated to semi-urban areas of Kathmandu, in large numbers. The researcher was thus able to find enough non school going children age 48-50 months, for the sample using children from such migrated populations. The total samples of children who were attending the ECD program were 144 and those not attending any preschool were 56. The total sample of children identified for the study was 200.

2.1.5 Principals

After collecting the list of schools from District Education Offices (DEO), Kathmandu eighteen schools were selected from urban, semi-urban and rural area using the purposive sampling technique, the researcher contacted the Principals on telephone. According to telephone contact appointments were fixed for the interview in all selected schools.

2.1.6 Teachers

The principals from each school introduced the pre-primary teachers to researcher for the interview. All teachers were female and they were teaching in pre-primary section and primary sections.

2.1.7 Mothers

Forty mothers were also interviewed for the study. Thirty six were mothers of the school going children and four were mothers of non-school going children. Two mothers were selected from each school. The school management and class teachers helped the researcher in selecting mothers for the interview because they frequently met them when they come to drop and pick their child and to pay school fees.

2.2. Tools used

2.2.1 Early Childhood School Environment Observation and Rating Scale

In this study Early Childhood School Environment Observation and Rating Scale (ECSEORS) was used to assess the preschool setting in the select dimensions. This was adapted from tools used by other researchers (Appendix- C Tool School Environment Assessment).

2.2.2 Environment Assessment and Rating Scale

This tool was used to evaluate the environment of the school to construct an appropriate measure the following step was undertaken.

- Significant aspects were identified as potential arenas for exploring the nature of Early Childhood Environments.
- Tools with existing rating for assessing preschool environment were identified and studied. These included the following measures:
 - The Early Childhood Environment Rating Scale (ECERS) by Harms and Clifford.
 - The Early Childhood Environment Rating Scale by Vrinda Dutta.
 - Tamilnadu Early Childhood Environment Rating Scale adapted from ECERS by M S Swaminathan Research Foundation (MSSRF).
 - A scale to measure quality of early childhood programmes by SNTD, Mumbai.
 - Early Childhood Tool developed by Delhi group of Task Force.

Various tools have been developed to evaluate the quality of the early childhood programmes:

1. Criterion-referenced measurement: In this there are defined standards for each criterion and scales/assessment profiles are developed to measure quality.

2. Measurement of performance against objectives where objectives are laid out, action steps are taken and the measurement is the achievement against these objectives.
3. Measurement of improvement or progress where the data on programme is collected at two points of time.
4. Outcome assessment where the quality of the programme is determined by outcomes for children.
5. Ranking assessment where the various aspects of the programme are placed on a continuum and then assessed.

One of the most frequently used scale is the Harms and Clifford's 'Early Childhood Environment Scale' (1980) which has been revised in 1998 to represent new findings from research (Cryer 1998). The scale provides a score of overall global quality by providing details for observation on 37 items on a seven point rating scale. The National Association for Education of Young Children (NAEYC) has also developed an observation scale to do self-study as a part of the process of accreditation. The scale has 71 items of process and structural variables and is scored on a three point rating scale where '3' indicates that the requirements are fully met. The items in the instrument are divided in the following sections: interaction between teachers and children, curriculum, physical environment, health and safety and nutrition.

The Tamil Nadu Early Childhood Environment Rating Scale (TECERS) is an adaptation of Harms & Clifford's Early Childhood Environment Rating Scale (ECERS). It would be more appropriate to say that TECERS is only based on ECERS and not an actual adaptation because: a) TECERS is a three point scale whereas ECERS is a seven point scale, b) The broad categories of classifying scale items are somewhat same but there is complete change and replacement of items in the TCERS scale.

An environment assessment tool was devised to assess the following areas. This tool was validated by a study undertaken at the Mobile Crèches with pre-schools in urban slums of Delhi. The tool was translated into Nepali. This tool was used to assess the ECD programs selected for in-depth study. Observations were made at the schools to evaluate the quality of each program. The areas covered by the measure were:

Physical set up:

- A. Location:-a. distance of school from home. b. Quality of building. c. Maintenance and safety of building.
- B. Surroundings:-a. Noise level/Distracting sounds. b. Safety c. Cleanliness.
- C. Outdoor space:-a. Space for children, b. Safety.
- D. Sanitary facilities:-a. Toilet facilities b. washing facilities c. Availability of water.
- E. Indoor space:-a. Space per child.
- F. Class room:-a. Light b. Ventilation c. Safety d .Cleanliness e. Room arrangement f. Seating arrangement.
- G. Indoor equipment:-a. Furniture b. Usability c. Storage space d. Display.

Health and Hygiene practices and facilities

- A. Hygiene practice:- a. Assistance in toileting b. Toileting and hygienic practices c. Schedule for toileting d. Personal grooming and cleanliness.
- B. Health facilities:-a. Rest/nap time/sleeping arrangement b. Periodic health checkups c. Isolated area for sick children, d. First-aid facility available. e. Health awareness programmes for staff and parents.
- C. Nutritional facilities:-a. Organization, and serving of food b. Quality of food c. Monitoring and supervision during mealtime.

Conceptual /curricular content

- A. Program:-a. Teacher/child ratio b. Program planning c. Follow up program
- B. Activities conducted:-a. Appropriateness of activities b. Planning for non-academic activities c. Time allotted for non-academic activities
- C. Balance of activities:-a. Action oriented activities followed by a quiet activity and vice versa.

- D. Evaluation: a. Maintenance of records b. Assessment of children
- E. Teaching and learning material:-a. Equipments/material for activities b. Nature of materials c. Variety in teaching learning materials/aids d. Equipment e. Use of teaching-learning materials
- F. Teaching methods, style and behaviour:-a. teaching methods, b. Participation of children c. Individual attention towards the children, d. Verbal behaviour, e. Non-verbal behaviour
- G. Physical-motor activities:-a. Gross Motor activities b. Variety of gross-motor activities c. Variety of fine motor activities
- H. Use of music and movement:-a. planned music and movement time provided b. Variety of instruments
- I. Language activities:-a. Expressive language b. enhancing comprehension
- J. Cognitive activities: -a. Variety of cognitive activities b. Planning of cognitive activities
- K. Development of social skills:-a. Arrival and departure b. Social interaction among children c. resolving conflicts among children
- L. Provisions for staff: a. Staff-staff interaction b. Facilities for the staff

Table 10: Indicators for Early Childhood Environment Observation Rating Scale

Physical set up	Health and Other Facilities	Conceptual/curricular content
Location	Hygiene practices	Programme
Surroundings	Health facilities	Activities conducted
Outdoor space	Nutritional facilities	Balance of activities
Sanitary facilities		Evaluation
Indoor space		Teaching learning material
Class room		Teaching methods, style and behaviour
Indoor equipment		Physical motor activities
		Use of Music and Movement

2.2.3 The Development Assessment Measure

The Development Assessment Measure was used to assess the overall development of children in pre-schools and also children not attending any pre-school. It assessed children in the following areas of development-physical, motor, social, emotional, and verbal/ language.

The Developmental Assessment Measure (DAM) was adapted from the tool used in the Study under taken at Mobile Crèches (2003-2004, unpublished), funded by Bernard van Leer Foundation. This was further developed using the Cognitive Indices tool which was compiled by students of Lady Irwin College, Dept. of Child Development and used for a Nutritional Assessment Study conducted by Nutrition Foundation of India. The DAM also used items from Assessment Form of Developmental Assessment Scale for Indian Infants (DASII), Vineland Social Maturity Scale, Portage Checklist and the Denver Developmental reference chart. The tool was translated into Nepali for use in the study. Development Assessment Measure I was used to assess performance and verbal development of children attending schools and non-school going children. (Appendix : Tool for DAM D, D1 & D2)

The items incorporated in the tools DAM I were as follows:

Table 11: Categories in the Developmental Assessment Measure (DAM I)

S. No.	PERFORMANCE	VERBAL
1.	Making the same pattern	Information
2.	Following Instruction	Verbal problem solving
3.	Which is different	Arithmetic reasoning
4.	Classification	Analogies
5.	Number concept	Action agent
6.	Visual memory	Story recall sequence
7.	Temporal relationship	
8.	Auditory memory	

DAM II was used for assessing physical, motor and socio-emotional developmental indicators of all the children.

Table 12: Categories in the Developmental Assessment Measure (DAM II)

S. No.	Developmental indicators
1.	Gross motor development
2.	Fine motor development
3.	Socio-emotional development
4.	Self help skills

2.2.4 Teacher Rating Scale

Teacher Rating Scale was used for assessing children’s classroom behaviour and performance by the class teacher. This rating tool was used in a study “Significance of ECCD For Children in Vulnerable Urban Settings “ by MOBILE CRECHES, New Delhi. It was translated in Nepali with some changes.

Teacher Rating Scale was incorporated as a part of the study in order to correlate the child’s performance on the Development Assessment Measure I & II with teacher’s perception of the children’s behaviour in school and the classroom such as regularity, promptness in giving responses, language ability, interaction with peers, responsibility towards his belongings etc. Teacher’s rating scales were included with the idea that scores given by teachers correlated with development scores would provide insights about children’s predisposition to learning and the impact of school. However, the personal experiences of researchers in the field highlighted that the information available from the teachers was often not very accurate. (Appendix E TRS Questionnaire, Appendix E1 TRS Questionnaire in Nepali)

2.2.5 Anthropometric Measurement of Children

Anthropometric measurements, height and weight was taken to see the growth and health conditions of children. The height and weight were converted to Body Mass Index (BMI). BMI is a measure of the body weight related to height which can be used to determine if a person is underweight, at a normal weight, overweight or obese. According to National Centre for Health Science (NCHS) USA standard

expected height for age 4 and 5 is 102.9 cm and 106.6 cm respectively and weight for age 4 and 5 is 16.7 kg and 17.7 kg respectively.

BMI is calculated directly from a Nomogram. The formula used for calculation is

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height}^2 (\text{m}^2)}$$

(Wadhwa & Sharma, 2003)

Table 13: Body Mass Index for children age 2-20

Percentile Range		Category
1.	Less than 5 th percentile	Underweight
2.	5 th percentile to less than 85 th percentile	Normal
3.	85 th percentile to less than 95 th percentile	Overweight
4.	Equal to or greater than the 95 th percentile	Obese

Weight was measured in kilogram (kg.) and other measurement was taken in centimeter (cm). A bathroom scale, a portable weighing machine (Camrey-name of company) having capacity of 120 kg. was used for taking children's weight and a non-stretchable measuring tape was used to measure children's height. In the school of the rural areas it was interesting to take anthropometric measurements because for the children it was first time that they saw a weighing machine. Therefore the researcher had to take the measurements for the whole class and it was time consuming and tiring. After taking all the anthropometric measurements the records of the children who were part of the study had to be separated for the research work.

2.2.6 Interview Schedule for Principal

Principals from each school were interviewed to get the information about school and ECD programmes in the school. The interview schedule covered the following area-physical facilities of the school, school management, teachers and their qualifications, provisions for teachers and staff, curriculum and ECD programme. The schedule was used to get all the information and the interview data was coded. The profiles were created, tabulated and entered in computer. Appendix F: Questionnaire for Principals and Teachers.

2.2.7 Interview Schedule for Teachers

The schedule which was prepared for teachers covered the following areas- physical facilities of the school, school management, provisions for teachers and staff, curriculum and ECD programme. After collecting information from teachers, the data was coded. The profile was created, tabulated and entered in computer.

2.2.8 Interview Schedule for Parents

The interview schedule consisted of areas such as demographic profile of family, opinion about education and ECD programme, perceptions about the school regarding, curriculum, play, homework and infrastructure. After collecting information from parents data were coded. The profile was created, tabulated and entered in computer. Appendix F1 Questionnaire for parents.

2.2.9 Pre Testing of the Tools

Six schools were selected for pre test and among the 6 schools, 3 were government schools and 3 were private schools. These schools were from urban semi-urban and rural areas of Kathmandu district. The Environmental Assessment and Rating Scale was pre tested on these 6 schools and modifications made where ever required. All domains of School environment rating scale, such as physical set up, health and hygiene practices and facilities conceptual /curricular content of school environment were scored on a four point scale (1-2-3-4), the lowest being 1 and the highest being 4. For Development Assessment Measure 10 children (7 preschooler and 3 non school going children) were pre tested After pre testing few modification were made in the DAM I & II tools and in the scoring procedure. A maximum mark allocated to each item of DAM I was 2 and minimum was 0. According to child's performance they were scored 0, 1, or 2. If the child performs correctly that is able to complete, match or answer the question he/she gets a score of 2. A child scored 0 if he/she performed incorrectly. If the response is partially correct then a score of 1 is given. After observing the performance during the pre-testing process the child was scored on a 4 point scale (0-1-2- 3) for DAM II. The child who performed the task was scored a maximum mark of 3 and one who could not was scored 0. Six principals, six teachers

and 5 mothers were pre tested using the prepared questionnaire schedule .After pre testing few modification made in the questionnaire.

2.3 Method of Data Collection

The list of schools was collected from District Education Offices (DEO), Kathmandu in order to identify the 18 preschools from rural, semi-urban and urban area of Kathmandu district. Eight children from each school were selected with the help of school authorities and 56 non school going children were also selected from the school before joining pre-school. Eighteen principal and 18 teachers and were also selected from each schools. Thirty six school going children's mother and a 4 nonschool going children's mothers were also the sample. Environments of 18 schools were observed, tested, 200 children were also observed and tested using the prepared tools. Principals, teachers and mothers were interviewed.

Principals were the first person to whom I initially contacted for the study. In all school principals were friendly and shared their experiences and ideas of running schools effectively. Principals had very few class so in his/her leisure time asked the questions according to interview schedule at their office.

To collect all the information and to measure development it took more than 4 days for 8 children from one school. Because of conflict in the country data collection time was longer than estimated. In each area the schools covered were 3 private and 3 government and the sample children were 48. So within 12-15 days I finished collecting data and information gathering. Data collection process was easier in urban areas compared to rural areas. Rural areas were more time consuming because there were no facilities of transportation like taxi, bus and other local transport. But in urban areas the problem arose due to many *banda's*. Schools were closed for many days to ensure safety of schools and children. Therefore it was difficult to accomplish data collection in time in most areas due some problem or another.

2.4 Scoring Methods

The observation and test of school environment and children's performance were scored according to prepared scoring methods. Principals, teachers and parents were interviewed and content analysis done.

2.4.1 Scoring of Environment Assessment and Rating Scale

All domains of School environment rating scale, such as physical set up, health and hygiene practices and facilities conceptual /curricular content of school environment were scored on a four point scale(1-2-3-4), the lowest being 1 and the highest being 4. The school which had good building, surroundings, management, and safety scored 4 and the school which was poor in the concerned domain scored 1 only. The scores for each area were totaled to get domain scores. And all scores added gave an overall environment rating.

2.4.2 Scoring of Developmental Assessment Measure (DAM I & II)

Children's performance were observed, tested and scored according to tools. In the scoring process all the items incorporated in Performance (pattern making, following instructions, visual discrimination, classification (matching), number concept, visual memory, temporal relationship, auditory memory and copying pattern.) and Verbal (information, verbal problem solving, arithmetic reasoning analogies; action agent, story recall sequence) was undertaken. A maximum mark allocated to each item was 2 and minimum was 0. According to this the performance of each child was scored 0, 1, or 2. If the child performs correctly that is able to complete, match or answer the question he/she got a score of 2. A child scored 0 if he/she performed incorrectly. If the response is partially correct then a score of 1 was given.

The Developmental Assessment Measure (DAM II) assessed the following areas of development in children- physical-motor, socio-emotional, and self-help.

In physical motor development domain control over body movement of the child were included to test. Walking, jumping, running, creeping, hooping, climbing,

throwing, catching, clapping kicking, dancing and balancing movement were involved in physical motor domain. After observing the performance the child was scored on a 4 point scale (0-1-2- 3) for DAM II. The child who performed the task was scored a maximum mark of 3 and one who could not was scored 0. A partial accomplishment of task was scored 1.

Fine motor skills are co-ordinations in which the smaller muscles play major role. They develop gradually and lag behind gross motor skills. In fine motor skills area beading in the wire, tearing papers and pasting in the large outline, scribbling, drawing copying, coloring, painting and papers folding were included. The children were observed and scored while the child was performing. This domain was scored by rating the child on a four point scale 0-3, the lowest score on each item being 0 and highest 3.

In Socio-emotional development children were observed in many areas. How they interact with teacher, caregiver and friends in the school while playing, singing, dancing, eating and performing in the class room. Early social behavior is an important determinant of children's social attitude. In this domain also scoring was done by rating the child on a 4 point scale 0-3, the lowest score on each item being 0 and highest 3.

In self help skills children's ability in different areas such as going to toilet with or without help, removing clothes, buttoning and unbuttoning, tying shoes, eating and drinking without help was observed. In this domain also scoring was done by rating the child on a 4 point scale 0-3, the lowest score on each item being 0 and highest 3.

The scores were totaled up for each child for every area of DAM I & II. The totals were converted to percentages for each child. Mean scores were also calculated for each school and non school going child. A comparison of mean was made between private school children, government school children and non school going children in their overall development. In children's developmental assessment measure domains, t-test was used to find out the significant difference, comparison of

mean was made in between the mean score of government school children, private school children and non school going children.

Statistical t-tests were conducted to establish whether the differences were significant for both school environments as well as children's development in various domains and t-test was used to find out the significant difference between the mean score of early childhood development, school environment observation and rating scale of government and private school from urban, semi-urban and rural schools. A comparison of mean was made between urban school children, rural school children and semi-urban school going children in their overall development.

2.4.3 Scoring of Teacher Rating Scale (TRS)

A few more items were added to the original Rating Scale used by MOBILE CRECHES in Delhi. The TRS was scored by rating the child's activities and behavior on 4-point scale (0-1-2-3). The MOBILE CRECHES used a 3-point scale (0-1-2). As there was cluttering of data in the average category, it was convenient to modify the scoring. The items were given a score of 0 to 3.

2.4.4 Anthropometric Measures

All children's heights were measured in cm and weights in kgs.. To record the height and weight most of the private school provided a separate room but in government school I had to manage in the same class room and in some schools the school provided a corridor or a corner of the school compound.

2.5 Analysis of Data

List of schools in Kathmandu was collected from District Education Office (DEO) then 18 schools were selected and school environment was observed. Observed and tested data were computed. Data entry, tabulation of mean score of different domain of the school environment, Development Assessment Measures, Teacher rating scale were done carefully.

The schedules which were prepared to interview school principal, teacher and parents were corrected carefully. After collecting information from principal, teacher and parent's data were coded, the profile was created and tabulated and entered in the computer. Then the data was rechecked for the entered scores. Appropriate statistical techniques were used where required.

Mean score, standard deviation were also calculated and appropriate statistical tests applied where required. The ANOVA test also used to see differences among different clusters. The Student t- test of difference was used to ascertain whether the difference between sub groups were significant or not. The statistical analysis of the quantitative data was done on Microsoft Excel and SPSS. Figures, tables and photographs were also used to supplement the information wherever required.

3. FINDINGS

The findings have been discussed in this chapter under the four major sections-

- Survey of Schools
- Observations of school environment
- Children's developmental assessment
- Perspectives of principals, parents and teacher's

3.1 Survey of Schools

According to Department of Education, Sanathimi Bhaktapur on 2006 the total number of ECD centers in the whole country was 12,062. Private school based nursery classes (pre primary classes) are not included in this number. According to Flash Report 2010/011 there are 31,089 ECD/PPC s in the country, 26,733 (86.1%) ECDs are running as community- based ECD centres and community school based ECD/PPs. Thus rest 4316 (13.9%) of the ECD/PPCs are run by private schools.

From this increasing numbers of ECD centers we can assume that the situation of children is improving, young children are getting ECD based programmes for their foundation of life but in practice it is different. In the process of this research work I got an opportunity to visit many ECD centers in rural, semi-urban and urban areas of Nepal. On interacting with several people it was evident that there is a legal procedure to start ECD centers in a community or in government school. After fulfilling the required procedure the Department of Education will permit the School based ECD centers to start functioning.

Having got an opportunity to interact with community workers, principals and parents in an ECD awareness programme run by a NGO, I asked about the ECD centers in their community. I could not find the exact number of ECD centers of that district which was listed in the *Balbikas Calendar* published by Department of Education. One community worker shared his experience about how when there were no children actually they had to close the ECD center and inform the Department of Education. The closing process was very time consuming. They had to give all the reasons and clear all the

accounts. Once they closed the center and if at a later point they wanted to open new ECD centers this would take a long and laborious process to reopen or start a new one.

The number of published ECD centers in *Balbikas calendar* from DOE in 2009 was 26,523. The reality is that 26,523 centers do not run. Many are there only in name. Also the centres that were running were of very varied quality, in most instances rather poor.

The survey of the environment of the ECD centres in the rural and semi-urban areas of Kathmandu district of Nepal brings to light the fact that ECD centres lack the essentials for optimal child development such as good or appropriate buildings and class rooms, safe outdoor play environment, separate rooms for activities and play rooms, toys other resources which help teach colour recognition, size shapes, puzzles for creative development, toys and games requiring refined movements, at least 10 children's book, real or toy musical instruments, display of child's art work, and toys that teach the name of animals and birds. Most important of all, trained and qualified pre-school teachers in government schools do not follow the technique they have learned and although they are trained their teaching methods are still not child centred but teacher oriented.

The problems faced by the ECD programs of urban, semi-urban and rural areas are, inadequate infrastructure due to minimal funds, unqualified and poorly skilled staff such as teachers and *Aya didis*, lack of services for the children in ECD centres, lack of knowledge and skill in caring the children by workers.

3.1.1 Government Schools of Nepal

In some semi-urban and urban government schools there are lots of learning and playing materials in the class room and classrooms are also arranged according to ECD curriculum but trained teacher still followed traditional primary school teaching methods. In the traditional method, the teacher commonly uses teacher directed teaching styles which focus on text book and examination. While schools especially Government schools are expected to meet the needs of National Curriculum, teachers often spend significant amount of time on tasks other than teaching. Most of the teachers use traditional method of teaching in spite of the fact that they had received a short training (2 to 3 weeks) for primary classes or early childhood development. In

most of the rural government schools pre-primary classes teaching materials and toys are scarce and stationery condition is extremely poor. In the government schools most of the children are from low income family, so the parents are not in a position to provide essential stationery for the children.

In the class rooms children's activities are either unstructured or very controlled. There is no respectful behaviour towards children. In general teachers ignore children's desires, wishes and needs. They are only concerned about teaching 3Rs and giving homework to the children. In most of the Government schools, ECD training is provided to permanent primary school teachers who already have a lot of experience, in a traditional environment and is, as such, reluctant to adopt new teaching practice. Thus, even after receiving training, the teacher does not follow the techniques learned during the training period. According to Joshi (2003) ninety percent of primary school buildings of Kathmandu Valley are not suitable for students from the standpoint of learning environment.



Picture 1: Government Urban school



Picture 2: Government Semi urban school



Picture 3: Government Rural School



Picture 4: Government Semi urban school

3.1.2 Private Schools of Nepal

A private school is generally seen as an institution that provides education of better quality and parents have to spend lots of money for their child's education. Private schools have been established on a massive scale, not only in towns but also in remote villages. In the absence of a clear policy these private schools choose their own management system and set their own policies for student fees and teacher salaries. Their costs seem to be decided without a clear basis and appear to be motivated by profitability. The Education is focused on the successful achievement of Tenth Standard, (SLC) examination results.

More than 80 percent of children from private schools pass the SLC (School Leaving Certificate) examination while the results of government school children are very poor. Very few government schools have adequate facilities for different subjects such as science and computer, etc. Private schools use English as a language of instruction whereas government schools teach in Nepali. The rise of English as a prerequisite for social and economic inclusion is a major phenomenon in Nepal today. English language has become a necessary qualification in every field so the private schools have moved forward quickly to meet this need and government school have been left behind. (Joshi, 2003)

In private schools teacher teaches and speaks in English with the children and parents love to hear their children speak English.. Some private schools in rural areas charge a monthly fee not much higher than government schools- which charge all the money on admission but quality of education is much better than government school so parents are attracted to such type of private schools in rural areas.



Picture 5: Private Urban school



Picture 6: Private Urban school



Picture 7: Private Semi-urban school



Picture 8: Private Rural school

3.2 Observation of School Environment

In general schools are located in wide variety of geographical location such as, mountains, plains, rural, semi-urban, and urban areas in Nepal. Schools are an external medium that helps children acquire new knowledge and skills to grow into productive and capable citizens. Joyful and happy environment promotes diversity in learning. The school plays a crucial role in the development of cognitive, linguistic, social, emotional and moral function. It has a profound influence on children, their families and the community. A school can provide a wealth of opportunities for children inside and outside the classrooms. Therefore, the environment of a school, directly or indirectly affects the quality of education a child receives.

The quality of school environment was observed, scored and tabulated. The scores were further converted into grades to give greater readability of the data. The

frequency of schools graded as excellent, good, average and poor in various domains have been given in Tables 14, 15, and 16.

Statistical tests were conducted to establish whether the differences in the various domains of school environments were significant. (Appendix G-Scoring of Environment Assessment and Rating Scale)

Table 14: Quality of School Environment

Grade/ rating*	Observed Frequencies in Selected Domains of schools			
	Physical set up	Health and hygiene	Conceptual/ curricular content	Overall school environment
A	2	1	1	1
B	9	3	3	6
C	7	14	14	11
D	0	0	0	0
Total	18	18	18	18

* A = excellent, B = good, C = average, D = poor

Table 14 indicates that schools when observed and rated fall in Grade C in most areas pertaining to the school environment. The physical environment such as building, space, playground, classrooms were good in 9 of the total schools surveyed. The overall school environment was good in 6 out of 18 schools.

Table 15: Private School Environment Observation Rating

Areas observed	Rating of Schools								
	Rural Private schools			Semi-urban private Schools			Urban private Schools		
School code	01	02	03	04	05	06	07	08	09
Physical set up	C	B	B	B	C	C	B	A	A
Health and Hygiene	C	C	C	B	C	C	C	B	A
Conceptual curricular /content	C	C	C	C	C	C	B	B	A

The analysis of private schools indicates that only School 09 was excellent in all three selected domains. School 08 and 07 were good in the overall analysis. All others were average in the school environment as a whole. The scores show a higher quality in urban private school environment.

Table 16: Government School Environment Observation Rating

Areas observed	Rating of Schools								
	Rural government schools			Semi-urban government Schools			Urban government Schools		
School code	010	011	012	013	014	015	016	01	018
Physical set up	B	C	C	C	B	B	C	B	B
Health and Hygiene	C	C	C	C	C	C	C	B	C
Conceptual curricular /content	C	C	C	C	C	C	C	B	C

Government schools were average in most domains. The exception was school 017 that had a good rating on all three domains. A more detailed analysis of the school environment follows.

Among the 18 schools observed, in the physical set up domain only 2 (11.1%) private school were excellent and 9 (50%) schools were good. Of these 4 (22.2%) were private schools and 5 (27.7%) were government schools. Quality of school buildings, class rooms and indoor outdoor space of government schools was good compared to private schools that were running in rented buildings. But in sanitary facilities, class room arrangement, and in indoor equipment private schools were good as compared to government schools. Compared to government schools, private schools had neat and clean surroundings though space was not enough for the children.

In health and hygiene practices and facilities only 1 (5.5%) private school was excellent and other 3 (16, 6%) schools were good. Among three, one was a government school and 2 were (11.1%) private schools. There was no lunch or tiffin program in almost all sampled schools. Only in two private schools there was a lunch

program in the school and it was well managed. The school management was aware of the importance of nutrition and neatness and cleanliness in the feeding program. In one private school which has only pre-primary classes, school-provided tiffin was quite expensive and it was compulsory. In another school also it was compulsory but not so expensive and quality of food also good.

In conceptual /curricular content, private schools were excellent in different activities such as physical-motor, language and cognitive compared to government schools. Though government schools have enough spaces for the children to play, teachers do not follow the daily time schedule and they do not give much time for physical activities. But in private schools teachers give ample time to the children for physical and other activities. Compared to rural schools, urban school teachers were more active and give much attention in both government and private school because urban parents were much more aware than rural parents. One semi- urban school scored high because this school had good management system and principal was also young, motivated and active.

Government schools were average in most domains. The exception was school 017 that had a good rating on all three domains. The heartening finding was that none of the schools selected were poor in the domains selected. This could be due to the fact that the preschools were part of secondary schools and not independent preschools. All the schools had basic infrastructure and basic physical facilities. Only they were weak in management and rules and regulations. School management was influenced by politics in most of the government schools.

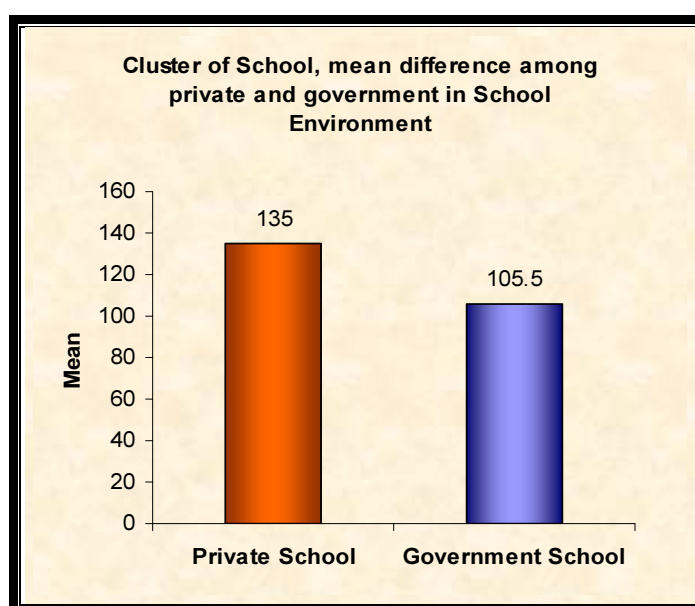
These results explicitly demonstrate that the school environment was not favorable and in accordance with the requirement for early childhood. Government is spending a lot of money to improve the quality of buildings, library, science lab, toilets, and other physical facilities but money is not used properly and allocating budget for ECD programmes also is low.

According to Khadka (2011) there is misuse of budget and fake reporting in the construction sector such as school extension, toilets, compounds etc). The evaluation team members from Education Department do fake evaluations. The

construction is not completed but in the evaluation report the technician reports the completion of the construction work. The school management committee and other member of school prepare the report and they do not use the granted money in the school.

When a school building has to be build the technician do not sign without taking fifteen thousand rupees at least as reported by one staff member. A person from a political party said that from technician to Ministry, schools have to pay extra money to get the fund from the government. Knowing all these matters the District Education Officer is unable to control this type of functioning. The physical environment both indoor and outdoor plays a great role in the holistic development of a child. A safe physical environment allows children to play safely and play is most important factor which helps positively in physical, social, emotional and language development. Arranging the outdoor and indoor environment in pre-primary school or ECD centers is essential for holistic development of children. If the class room is not organized the children will be running, fighting over the materials and make noise which is disturbing to everyone but if the classroom is organized the children will be busy, enjoy activities and learn more.

Figure 5: Mean difference in Private and Government School Environment



ACTIVITIES IN PRIVATE SCHOOL



Picture 9: Private Urban school



Picture 10: Private Semi-urban school



Picture 11: Govt. Semi-urban school



Picture 12: Private Semi-urban school



Picture 313: Private Urban school



Picture 14: Govt. Semi-urban school

There is a significant difference in the kind of school environment among private and government schools. Although the school building and play ground is bigger in the government schools, the maintenance is better in private schools.

An Urban Private School

Sample school (009) is an urban private school and one of the sample schools for the research work. This school is situated in the urban area of Kathmandu district, established in the year of 2004. The school building was rented for five years after which the school management will have to make a new agreement. According to number of children the space of the building was enough. Though it was in a residential house it was furnished according to the need of a pre-primary school and maintained well.

There was a well furnished Principal's room, and also a separate staff room. There were a total of 9 staff members including the Principal and 3 lady peons (Aya didi) and a cook. The school had enough teaching learning materials-charts, blocks, puzzles, beads, clay and varieties of equipments for outdoor play such as areas for sand and water play-buckets, mugs, spade etc. There was a separate place to put all the play materials. For indoor games the school had separate rooms. Total number of students in the school was 126 and in pre-primary classes 31. The school ground was big enough for the total number of children. Surroundings of the school were clean and safe. Toilets were clean and enough water facilities in the school. Though there were no separate toilets for boys and girls.

Class rooms were small in size but enough for 10 to 15 children. Adult child ratio was 1:15. The pre-primary class was arranged according to basic early childhood programme. There were enough charts, blocks, puzzles, story books according to age-group. the class room furniture were according to children's size and they were colourful. There were 4 ECD trained teachers so their teaching method was child centered. Children were friendly with the teacher. Teacher used respectful words for the children. School management was strict and encourage English speaking so the conversation with children was mostly in English inside and outside the class room. Corporal punishment was not allowed in the school. In the pre-

primary class there was enough teaching learning materials and the children had to learn the 3Rs though it was taught differently from the conventional methods. . Pre-primary children knew many rhymes in English and Nepali. Compared to Nepali songs and rhymes the children were more adept in English rhymes. Children could not communicate in English but they understood many words and sentences like ‘come here’, ‘where are you going?’, ‘Sit down’, ‘stand up’, and ‘go to toilet’, ‘good boy/girl, and bad boy/girl’. Most of the children were from upper middle and upper income families so they have pay about Rs.3500 per month as school fees. In other private schools the monthly fees were Rs. 300 to Rs. 1000. Only in comparison to some other private schools children were well dressed, neat and clean. They were friendly with their friends and teachers. They were allowed to express their feelings in Nepali with their teachers but not with the Principal and outsiders.

In this school also 8 children were selected with the help of the teacher and principal for the research. The researcher found the children less friendly compared to the rural school children. They were not much interested in doing the task on the Developmental Assessment Measure. One separate room was fixed for the research work. Children came one by one into that room and they were little scared and curious about what was to happen. They were not happy to get sweets from me. In most of the rural schools the children were excited about getting sweets and meet me the next day. After finishing the test the child from this school would say” bye maam, thank you maam” but they would never say ‘come again’. On the last day they said “see you again and come again.” This was taught to them by the teacher.

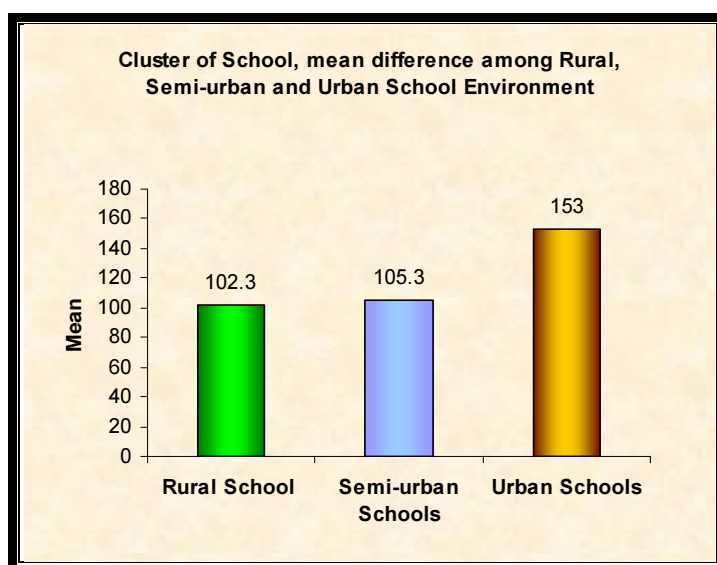
The 8 children were good in fine motor skills but they were poor in gross motor skills, language and storytelling. They can match the shapes, colors, and were perfect in puzzle work, drawing, and painting

Teachers from this school always followed the Early Childhood Education Curriculum because the Principal was also trained in ECD for six months. There was a lunch programme in the school. All children ate together in the dining room. After lunch they have to brush their teeth. They were taught how to brush their teeth after

that they have to rest for 30 minutes in the own class room. The school had health facilities. There was a sick room and a first aid facility also there.

This school scored high in the school environment domain. A score of 83 in the physical set up, 29 in health and hygiene facilities and 115 in conceptual/curricular content, which was highest among the all 18 schools.

Figure 6: School Environment in Rural, Semi-urban and Urban Schools



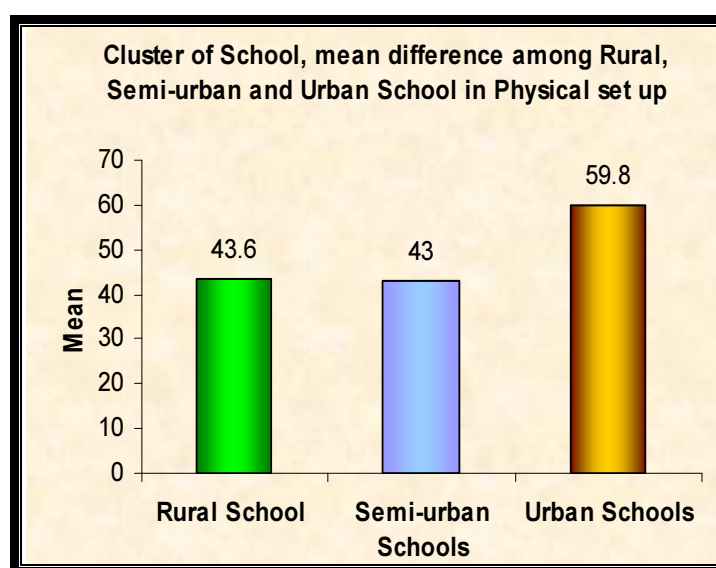
3.2.1 Physical set up

There were differences between urban & semi-urban, urban and rural school environments. Compared to rural and semi-urban schools, urban schools (government and private) were better in physical set up, health and hygiene facilities and conceptual/curricular content. In the urban areas, parent's education level is also high and the teachers are also better trained and qualified. Many other facilities are available in urban schools.

While observing physical set up of school environments observation tools were used. In the physical set up domain, location, surroundings, outdoor space, sanitary facilities, indoor space, class room, indoor equipment were observed. Location includes distance from homes to school, quality of building, maintenance and safety. Surroundings include noise level, safety and cleanliness. Outdoor space includes space and safety points of view for the children while they are outside the class room. Sanitary facilities include toilets and washing facilities and availability of

water to drink and for the toilet. Indoor includes space per child in the class room. Light, ventilation, safety, cleanliness, room arrangement and seating arrangement were included in classroom domain. Indoor equipment includes furniture and usability, storage space and display. After observing all these areas in all 18 schools only two private schools scored A (Excellent) and four private and five government schools scored B (Good). Though private school buildings were not according to the school purpose (they were residential houses) sanitary facility, classroom arrangement, cleanliness was good in private schools. The peon or helpers (Didi's) were very caring, they assisted small children while eating and toileting but in government school small children do not get support from peon or care giver. Toilets were also dirty compared to private schools. There was enough water in government school but it was wasted and misused. In rural government schools there was enough outdoor space for the children, but it was not safe, there was no boundary walls often and was unsafe for playing. Class rooms were also spacious in most of the government schools but rough, untidy and not arranged properly for the activities of small children. In private schools class rooms were congested and teacher-child ratio was also high compared to government school. Class rooms in most of the government schools had enough light and ventilation. In one semi urban government school class rooms were small and had not enough light and ventilation. Comparing all these domains private schools scored higher because of better management, sanitation, cleanliness, classroom arrangement.

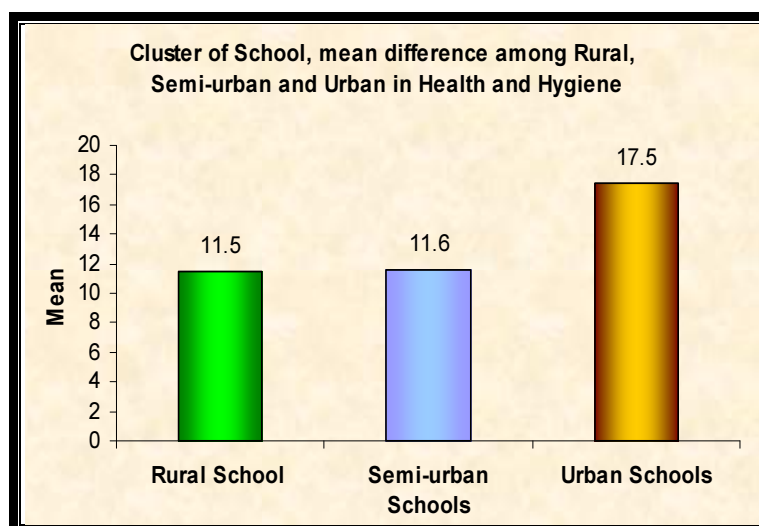
Figure 7: Physical set up in Private and Government schools



3.2.2 Health and Hygiene

In health and hygiene practices and facilities only one (5.6%) private school was excellent and other three (16.7 %) schools were good. Among three one was a government school and two were (11.1%) private schools. There was no lunch or tiffin program in almost all sampled schools. Only in two private schools there was a lunch program in the school and it was well managed. In this school the school management was aware of the importance of nutrition and neatness and cleanliness in the feeding program. In one private school which had only pre-primary classes, school-provided Tiffin was quite expensive and it was compulsory. In another school also it was compulsory but not so expensive and quality of food also good.

Figure 8: Health and hygiene in Private and Government schools



There is a significant difference among urban and semi-urban, and urban and rural school in health and hygiene. Compared to rural, semi-urban, and urban schools, urban schools have a lot of competition and in order to attract more students, urban school give more facilities and as such score higher in health and hygiene. It is because of this as well that the fees and charges are more expensive in urban areas.

In health and hygiene domain, hygiene practice, health facilities, arrangement for sick children, nutritional facilities were included in observation. Hygiene practices included assistance in toileting, toileting and hygienic practices, schedule for toileting, personal grooming and cleanliness. In health facilities-rest nap time/ sleeping

arrangement, periodic health checkups, first-aid facility, health awareness programmes for staff and parents are included. In nutritional facilities domain the quality of food in lunch or Tiffin and service of food, monitoring and supervision during mealtime were included. Only one urban private school score was excellent in health and hygiene. Only two from urban and semi-urban private school and one urban government school scored good in health and hygiene. Most of the schools of Nepal do not provide lunch or Tiffin in the school. In private school management



Picture 15: Lunch Time in urban school

strictly ask the parents to send Tiffin box for their children but in Government school most of school children do not bring Tiffin from home, some children bring money for their Tiffin. In government schools few children of pre-primary classes and primary classes bring Tiffin and at the Tiffin time they rarely

wash their hand before eating. At the Tiffin time no teacher or caregiver is there to supervise and teach children about health and hygiene. Children eat their Tiffin sometimes inside the classroom and sometime outside in the play ground. Because of plastics boxes of instant noodles and junk food the ground also looks untidy compared to private schools. In private schools there were strict rules for the small children. If school is not providing Tiffin or Lunch, parents must send from their home and at the Tiffin time at least one teacher should be there in the class room or at the dining place. Because of this reason children from private school get some knowledge of health and hygiene and they usually wash their hand before eating though they also use a spoon to eat. Among 18 schools there was no isolated area for sick children. In two urban private school there was napping room for small children and in other private schools children had to take a nap in the classroom keeping their head on the desk or lie on the bench. Among 9 governments school (Rural urban and semi-urban) only one urban government school had nap time for pre-primary children and children had to take nap putting their head down on the desk.

3.2.3 Conceptual /Curricular Content

In conceptual /curricular content, private schools were excellent in different activities, such as physical-motor, language and cognitive compared to government schools. Though government schools have enough spaces for the children to play, teachers do not follow the daily time schedule and they do not give much time for physical activities. However in private schools teachers give ample time to the children for physical and other activities. Compared to rural schools urban school teachers are more active and give much more attention in both government and private school as urban parents were more aware than rural parents. One semi- urban school scored high because this school had good management system and principal was also young, motivated and active.

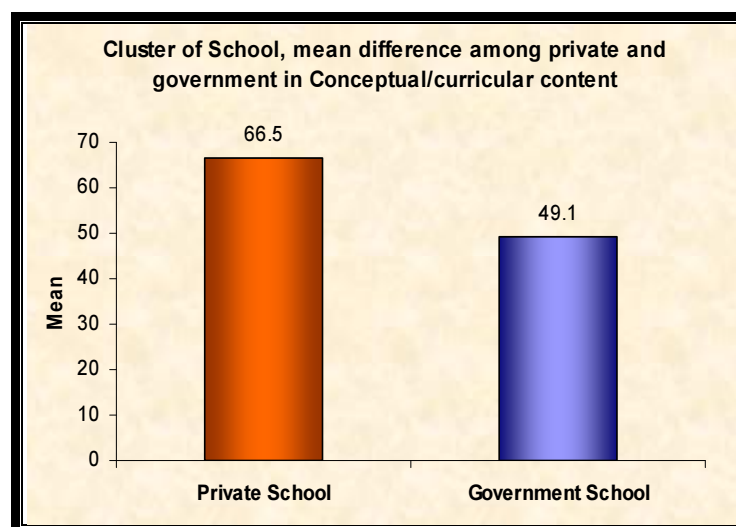
In conceptual /curricular content the domains-program, activities conducted, evaluation teaching methods, teaching learning materials, physical motor activities, and language activities cognitive activities social skills, musical instrument used in classroom activities and provision of staff were included.

In the conceptual/ curricular content domain many things were observed. In this domain all private and government schools of rural and semi-urban scored average. Only one private school of urban area scored excellent while observing the school it was found to be running only pre-primary classes and the principal was very much interested and aware of holistic approach in teaching learning process because she had one year Montessori methods of training. Though school's monthly fees are expensive compared to other schools, teachers are also trained. They had weekly program planning; they conducted all the activities according to their program planned for the pre-primary classes. Teaching learning materials such as charts, picture books, story books, flash cards, beads, puzzles, blocks were also enough in this school. In other semi-urban and urban private school there were trained teachers and school also had enough teaching learning materials but teaching methods were traditional (teacher oriented lecture method). To fulfil parents' demand school management and teacher were very much concerned with teaching 3Rs (reading writing and arithmetic skills). Private schools had play time in the daily schedule and they followed the routine but in government school teachers prepared daily lesson

plans but they did not follow them. In government schools teacher do not organize physical- motor activities (gross and fine motor activities) for the children. In the semi- urban and urban private schools trained teachers and principals have knowledge about the importance of gross motor activities (climbing, throwing, catching, jumping, running, physical activities) and fine motor activities (threading beads, pasting, colouring, cutting with scissor, block building, sand and water play) but they do not apply it in the teaching learning process. According to the trained teachers in government schools these activities were not followed because learning materials were not available and classroom environment was not favourable. Schools from rural, semi-urban and urban areas scored poorly in cognitive activities such as naming, identification of colours, animals, birds, vegetables, fruits, daily use item, matching, sorting, pre-arithmetic concepts as teachers or caregivers do not provide opportunities for developing these skills. Only one urban government school scored “good” because it had some activities of motor, language and cognitive development. Two urban private schools also scored “good” in conceptual curricular activities because school management, teacher and also parents from urban areas were aware of the importance of holistic development of the child.

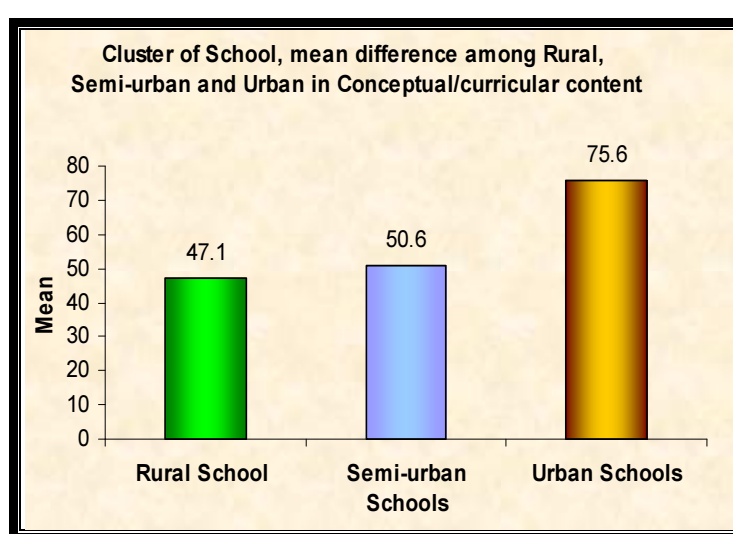
In the provision of staff, domain government school teacher had more facilities compared to private school teachers for example government school teachers have Pension after retirement, sometime bonus and free uniform.

Figure 9: Conceptual /curricular content in private and government schools



There is a significant difference among private and government schools in conceptual/ curricular content. In government schools there were a lot of facilities (e.g. high salary, bonus, festivals and long winter and summer vacation and other yearly leaves retirement facilities) for the teaching staff but the management was affected by politics and after utilizing such facilities they were not sincere to their job. However in private schools everything is dependent on school management so the score in the domain conceptual/ curricular content is better than government schools.

Figure 10: Conceptual/ curricular content of Urban, Semi-urban, and Rural schools



There are significant difference between rural and urban and urban and semi-urban schools in conceptual/ curricular content. In the urban areas parent's education level is high compared to rural and semi-urban areas so they are more aware of education, school management and environment. To meet parental demands school management of urban areas are conscious about the quality of services that they should provide. In urban schools teachers are also better trained and qualified. Compared to rural and semi urban schools the teachers conduct more activities for the children. Schools also have more teaching learning materials and many other facilities such as blocks, charts, puzzels, clay, art materialsetc are also available in urban school. Appendix J: Scores on early childhood school environment, Appendix J1: Scores Converted to grades on early childhood school environment.

Case Profile of a Rural Government School

Initially, the researcher fixed a date to visit the school by talking to the Principal over the telephone. On the first day of the visit the researcher observed the school environment and discussed with the Principal and the pre-primary teachers in the school to select the sample of 8 children aged 48 to 50 months. Then next day, the researcher visited the school again to assess and test the overall development of children using Development Assessment Measure. The researcher obtained permission from the Principal to observe and test the children in the pre-primary class and visited the classes.

This school was located in the rural area of Kathmandu district. It was established in the year 1963. A general inspection of the school reveals that the School building was not of a good standard like the other Government schools though the school owned the school building it was not maintained well. There were 17 staff members including the Principal. The Staff room and Principal's room were together. The school used the same room for teaching materials, charts, modules, playing and teaching learning materials for pre-primary classes. The room was congested for the staff. The total numbers of students in the school were 379.

The school play ground was small and not fenced. There were lots of dangerous places in the school ground where small children could have accidents. Further there were many worn out iron furniture, wood piles, potholes, big stones, and uneven places around the school ground and the school building. The surroundings of school were not clean and safe.

There were also no separate toilets for the elder girls and small children. Even though there was enough water in the school the toilets were unclean and slippery. Sanitation facilities were also poor in this school.

The class room was small and congested and there were more than 60 students between Grades I to X. In the pre-primary levels there were 17 children aged 4 to 8 years. In pre-primary class space for the children was enough but classroom was not arranged properly.

In the pre-primary class rooms there were no charts, calendars, and other teaching learning aids. The class rooms had only furniture, desks and benches which were again not

of appropriate size for small children. The teaching learning materials were not proper. Teacher was not using the existing materials at school. The pre-primary school teacher's teaching method was traditional she did not give attention to the children individually. While observing her class her voice was often harsh and irritable she used corporal punishment. When I entered the classroom, the pre-primary class children were fighting with the older children. It did not appear to be anything serious and only seemed to look like playing, and others were laughing, no teacher was present there. When I asked the children about their teacher, they said that she had not come yet and would come after finishing her household work and that her house was close to the school. The time was 10:30am and the teacher came after another half an hour. Thereafter 8 children were selected according to the register and anthropometric measurement was taken. The teacher helped to control the children while taking height and weight. After two hours, she went home again to feed her cattle. That was her daily schedule. She told the children that the children could leave for home after finishing the researcher's work, "Yo miss ko kam sakie pachi timiharu Ghara jao". Normally, in most of the schools, children refer to all lady teachers as Miss (both Married and Unmarried). Nowadays, the school management and the teachers are teaching the children to refer to married lady teachers as "madam". The children were very happy with the announcement. As usual, on that day as well the pre-primary teacher came to the school, signed her register and went to the class for about two hours and went back home. She was appointed as a pre-primary teacher according to the quota system. Her salary was only one thousand Nepali rupees. She did get her ECD teacher training, but was not interested in teaching because of the low remuneration. The children could sing a few rhymes learned from teacher and many local songs which they learned from the Radio and T.V.

As we could have guessed, the teacher did not follow the Early Childhood Education Curriculum despite her ECD training. She was used to teach reading and writing alphabet of Nepali and English and arithmetic up to 50 in Nepali and English. Sometime, she read a story to the children There was no provision for fine and gross motor skills, no drawing, painting, playing with block and other play materials. The school was in a rural area so the children were very active in different physical activities. They normally played with mud and water. There was lots of free time for the children to play at home and (outside their home as they did not have any homework and the parents also didn't care about the home work even if it was given.

The next day also the teacher was late as usual and made an excuse that she presumed the researcher would be at the school only after 1:00 pm. She further told to the researcher that her salary was not sufficient, so she had to give time to her household work and her side business of running a tea shop where she use to sell instant food and tea during the Tiffin break.

There were no health and hygiene facilities, no sick room, no separate staff room, and library and store room. The school scored low in the school environment domain because of all the above considerations- physical set up (only 32%), health and hygiene (31%), conceptual /circular content (31.25%)], which is very low compared to urban private school. One urban private school scored 94.3% in physical set up, 90.6% in health and hygiene and 89.8 % in conceptual /circular content.

The Development Assessment Measure of the school children from this school was poor. The researcher found that the small children learn many things from the elder children (both good as well as bad).The description of this school portray a typical scenario of a rural government school in Nepal.



Picture 16: Government school classroom



Picture 17: Private school classroom



Picture 18: Government school classroom



Picture 19: Private school classroom



Picture 20: Government school



Picture 21: Private school



Picture 22: Private school



Picture 23: Private school



Picture 24: Private school



Picture 25: Private school



Picture 26: Private school



Picture 27: Private school



Picture 28: Private school



Picture 29: Private school



Picture 30: Private school



Picture 31: Private school



Picture 32: Government school



Picture 33: Government school



Picture 34: Private school



Picture 35: Teacher Training



Picture 36: Government school



Picture 37: Private school

3.3 Development Assessment Measure (Component I & II)

“If you received the best start in your earliest years of life, you are more likely to have grown healthily, developed language and learning capacities, gone to school and led a productive, rewarding life (UNICEF, 2007). The future of any society depends on its ability to foster the health and well-being of next generation. That’s why many people say that today’s children will become tomorrow’s citizens, workers and parents. When we invest wisely in children and families, the next generation will pay back through a lifetime of productivity and responsible citizenship. When we fail to provide children a strong foundation-through holistic development, we put our future at risk. Early childhood development is a foundation for community development and economic development, as capable children become the foundation of prosperous and sustainable society (Council, 2007). Early childhood is the most rapid period of development in a human life. A child who has a good experience in an ECD programme has a combination of positive characteristic, socially and emotionally healthy, confident, and friendly, has good peer relationship, tackles challenging tasks, has good language skills and communicating ability they are always attentive in the classroom. So the future of a society depends on its ability to foster the health and well- being of the next generation. Emotional well-being, social competence, and cognitive abilities are the bricks that comprise the foundation of human development. What a child experiences during the early years “sets a critical foundation for the entire life course” (Irwin, Siddiqi, & Hertzman, 2007; Council, 2007).

The ultimate goal of ECD programmed is to improve young children’s capacity to develop and learn. A child who has a good experience in an ECD programme has a combination of positive characteristic, socially and emotionally healthy, confident, and friendly, has good peer relationship, tackles challenging tasks, has good language skills and communicating ability they are always attentive in the classroom. So the future of a society depends on its ability to foster the health and well- being of the next generation. Emotional well-being, social competence, and cognitive abilities are the bricks that comprise the foundation of human development.

ECD including physical, social, emotional and cognitive domains strongly influences basic learning. Quality ECD programmes are those that nurture all aspect of children's development. According to Education for All (EFA) document, ECD should be the first goal for educational development of any country. Nepal being one of the partners in the preparation of EFA goal and strategies at the global level is fully committed to promotion of ECD within the country (Shrestha, Bajracharya, Aryal, Thapa, & Bajracharya, 2008). Though the importance of early childhood care and education was felt, around 1987, in Nepal, community and institutional ECD centers are growing rapidly in number not in quality the country. The Ministry of Education under its Basic and Primary Education Programme (BPEP) in 1997, started to take initiatives to open pre-primary classes in government and community schools, in order to separate the under five children from Grade I and improve the teaching learning situation in Grade I. The primary goal of establishing pre-primary classes on separating the under aged children from Grade I and holistic development approach for young children was secondary concern. The country has set a target to provide ECD services to 80% of children aged 3-5 by the year of 2015 (Shrestha, Bajracharya, Aryal, Thapa, & Bajracharya, 2008). The Department of Education (DOE) is playing a leading role in expanding ECD service in the country. By the end of 2007 there were around 17 thousand ECD centers being run under the DOE and the numbers are increasing every year. At the end of 2010 the total number of community based and school based ECD/PPCS are 29,089 of which 4,316 pre-school classes are running in institutional schools (private schools) and the rest 24,773 are running in the government schools and as a community based ECD (DOE,.2010).

The decade of the 1990s has been remarkable in the history of primary education in Nepal. The government initiated the Basic and Primary Education Project (BPEP) in 1992 with three main objectives that is A. universal access to basic education, B. quality in education and C. efficient management of education. Nepal signed the United Nations Convention on the Rights of the Child (CRC) IN 1990. The Constitution of Nepal (1990) guarantees the right of the child to education, irrespective of gender, cast, ethnic or social status. Soon after ratifying CRC, Nepal enacted the Child Act (1992). The Child Act recognizes the primary role of families

in childcare (Acharya, 2002). Children cannot only be educated, but they can be powerful citizen and builders of healthy, peaceful and prosperous society in the country when they are provided excellent programme of ECD in their early age. Educations for All National Plan of Action Nepal (2001-2015), EFA (2004-2009), Strategy Paper for Early Childhood Development in Nepal (2004) have all stressed the need for quantitative and qualitative expansion of ECD programme. These plan and strategies have recognized that children's physical, social, emotional, and mental development can be realized through a carefully implemented ECD programme.

The Development Assessment Measure (DAM I & II) was used to assess the variety of responses obtained through child's performance on several tasks. These tasks were based on developmental indicators which was used to observe a child's language, cognition, and physical-motor, social, emotional and self-help development. Using all these component 144 school children from private and government school and 56 non school going children were observed while they were asked to perform individually from each school. The children were asked a set of questions which were based on developmental tasks, responses were scored using the scoring manual prepared on the basis of the test and further adaptation during pre-testing. Each response was scored, tabulated and computed.

Table 17: Scores on Development Assessment Measure I & II of Private, Government and Non-School Going Children

Children	N	DAM I	DAM II	Total
*MM.		192	294	486
PSGC	72	137.36	226.96	364.32
GSGC	72	138.13	226.61	364.74
NSGC	56	110.29	155.59	265.88
Total No	200			

* MM. = maximum marks, PSGC= Private school going children, GSGC = Government school going children, NSGC = Non school going children

The results of Table 17 indicate that there no differences in overall scores on DAM I and DAM II between private and government school children. The differences are significant between school-going and non-school going children. Having access to school seems a crucial indicator for developmental outcomes.

A further analysis of data on scores of children, show that urban private schools are more effective in raising the scores on DAM I and II higher for children attending them. The children also come from higher income families. The school fees collected from the parents is higher. There is more control exercised by the Principal and School Management on the performance of teachers.

Table 18: Scores on Development Assessment Measure I of Private, Government and Non-School Going Children

Children	N	Dam I	DAM II	Total
MM		192	294	486
*PRSC	24	128.48	225.40	353.88
PSUSC	24	135.38	225.92	361.30
PUSC	24	150.88	232.42	383.30
GRSC	24	135.54	224.54	360.08
GSUSC	24	142.83	226.50	369.33
GUSC	24	136.00	228.79	364.79
NSGC	56	110.29	155.59	265.88
Total NO	200			

* PRSC = Private rural school children, PSUSC = private semi- urban school children, PUSC = private urban school children, GRSC =government rural school children, GSUSC = government semi urban school children, GUSC = government urban school children, NSGC = non school going children, MM= maximum marks

Table 18 shows the various components of DAM I. These include performance items and verbal items. All Performance Items are sensitive to the amount of practice given to children in the school environment/ curriculum. Verbal Items were less sensitive to practice but more sensitive to general exposure and confidence children gained in their environments. Performance items and verbal items were best attempted by the private urban school children with mean scores of 62.17 and 88.71 respectively. Non school going children were the lowest with scores of

42.50 and 67.96 on the performance and verbal items respectively. Private rural schools showed low practice in performance items as indicated by the low scores of children (43.04) attending them. The private rural schools did badly on Performance Items such as Visual memory, Temporal Relationship, Classification and Auditory memory as well. All schools performed poorly on Number concept items.

In the Verbal items all children performed well in areas such as Information, Problem solving and Storytelling Sequence. They performed poorly on Arithmetic Reasoning. Private Rural Schools performed badly on Action Agent items as well.

Table 19: Scores on Components of Development Assessment Measure I

COMPONENT	SCHOOL CODE						
	PRSC	PSUSC	PUSC	GRSC	GSUSC	GUSC	NSGC
	SCORES on DAM I						
A. Performance (MM)	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Pattern making (12)	8.04	8.92	10.29	9.13	9.71	9.38	7.68
Following Ist. (10)	8.17	7.71	8.83	7.75	8.29	7.75	6.14
Visual discrimn. (12)	7.58	8.29	10.13	8.83	9.33	8.50	5.79
Classification (12)	5.50	8.38	10.17	8.58	9.46	8.17	5.86
Number concept (8)	2.04	2.46	2.75	1.67	2.21	2.08	0.73
Visual memory (8)	3.88	5.79	6.71	6.29	6.21	5.88	5.30
Temporal relshp (8)	3.83	5.92	6.58	6.25	6.38	5.46	5.79
Auditory memory (8)	4.00	5.79	6.71	5.96	6.46	5.83	5.21
Total Performance	43.04	53.25	62.17	54.46	58.04	53.04	42.50
B. Verbal (MM)	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Information (32)	25.00	25.83	28.79	27.38	27.33	26.75	21.21
Verbal problem solving (16)	12.92	12.88	13.71	12.21	13.00	12.92	12.16
Arithmetic reasoning (14)	4.96	4.88	4.17	1.71	2.58	2.63	1.43
Analogies (18)	15.17	15.00	15.42	14.33	15.42	15.67	10.68
Action agent (12)	8.83	9.92	10.50	10.79	11.29	10.25	9.43
Story recall sequence (18)	15.92	14.46	16.13	14.67	15.17	14.75	13.05
Total Verbal	82.79	82.96	88.71	81.08	84.79	82.96	67.96

The DAM II components indicate that there were no differences on Physical-motor items in School going and Non-school going children. Fine motor activities,

Self-help skills and Socio-emotional dimensions were clearly influenced by going to school. Most of the non-school going children were with their mothers who were domestic helpers in families. Most tasks were done for the child by the mothers, therefore providing little opportunity for skill development. Also overall exposure to people was less. Private school children did poorer than Government school children on Self-help skills and fine motor skills marginally.

Table 20: Scores on Components of Development Assessment Measure II

Children	COMPONENTS OF DAM II			
	*PMD	FMS	SED	SHS
**M.M.	96	48	69	81
PSGC	74.0 (77.08%)	24.9 (51.83)	58.8 (85.24%)	69.2 (85.40%)
GSGC	75.8 (78.97%)	27.4 (57.06%)	58.2 (84.33%)	71.9 (88.70%)
NSGC	75.5 (78.65%)	16.9 (35.18%)	30.9 (44.81%)	32.3 (39.50)

*PMD =Physical Motor Development, FMS=Fine Motor Skill, SED = Social Emotional Development, SHS = Self Help Skill

**MM=Maximum marks, PSGC=Private School Going Children, GSGC= Government School Going Children, NSGC= Non School Going Children

There was significant difference in school going children and non-school going children in almost all areas assessed by the DAM I & II. The difference in scores were significant in each area for school going and non-school going children in fine motor development, social-emotional development, self-help skills and overall Development Assessment Measurement. This indicated that attending school has made a difference to their scores on the test used. Non- school going children were able to run, jump, climb, catch, throw, skip, hoop, and balance easily so there is no significant difference in physical development among non-school going children and school going children from both government and private school in gross motor areas. But in fine motor skills there were a variety of activities in school like-threading beads, painting, colouring, pasting, writing, cutting and other activities. School going children scored

high due to the fact that in school children have an opportunity to participate in a variety of activities.

Table 21: Scores on Development Assessment Measure II of Children from different schools and non-school going children

Types of Schools *	Average score (%)in various domains**			
	DAM II			
	PMD	FMS	SED	SHS
M.M.	96	48	69	81
PRSC	73.95 (77.03%)	22.50 (46.87%)	58.00 (84.05%)	71.25 (87.95%)
PSUSC	76.08 (79.25%)	22.50 (46.87%)	58.00 (84.05%)	71.25 (87.95%)
PUSC	71.95 (74.94%)	29.62 (61.70%)	60.45 (87.60%)	65.04 (80.29%)
GRSC	75.70 (78.85%)	27.25 (56.77%)	58.04 (84.11%)	71.04 (87.70%)
GSUSC	76.66 (79.85%)	29.29 (61.02%)	56.87 (82.42%)	71.45 (88.20%)
GUSC	75.08 (78.20%)	25.62 (53.37%)	59.66 (86.46%)	73.04 (90.17%)
NSGC	75.5 (78.65%)	16.9 (35.18%)	30.9 (44.81%)	32.3 (39.50)

In social-emotional development there is a significant difference in school going and non- school going children because school going children interact with their peer group. They have more opportunities to interact with people such as principal, teachers, *ayas* or caretakers, other children and visitors. School going children greet formally, follow school rules and also can comfort their friends in distress. They showed greater competency in verbal exchanges. In school, children learn to be with others and in turn learn to regulate emotional behaviour with teachers, caregivers and peer group.

In urban private school the teachers had to be very careful on conducting different physical activities. Most of children are from wealthy and educated family.

So children were controlled and protected by teachers at school and parents at home. In rural and semi-urban schools, children were free for physical movement and activities at school and also at home. However, in semi-urban and rural private schools most of the children come to school walking unlike in urban schools where children come by bus or parents or elder drop them. So the urban children have less physical movement. Another reason was in urban school and home there were less space and time for physical movement and activities. Therefore children from urban areas had less confidence in physical activities. Non school going children also scored high compare to private urban and semi-urban school children. This was because the non school going children had lot of time for physical activities.

Development Assessment Measure (DAM I) performance- such as making different patterns of simple drawing, following instruction, visual memory, temporal relationship and in verbal information, verbal problem solving, arithmetic reasoning, analogies, action agent and story recall sequence was observed, tested and scored for all children Table 17,18and 19 shows the result of test in different areas of development among 200 children.

While comparing government school going children and private school going children, in fine-motor skills private urban school scored higher because there were lots of fine motor skill activities in the school. In self-help skills, children from government urban schools scored high because in private schools, teachers and caretakers help small children in different activities (taking off shoes, putting books inside the school bag,) and parent of private school children were also protective, they do not allow children to do simple work at home. In rural and semi-urban government schools, teachers were not aware of children's activities; they do not care much about neatness and cleanliness so children were also careless. Most of the children in urban government schools are from low income families they are competent in doing household chores, so children were more confident and did their work by themselves. They can take care of their things-books, bag etc. In school also teacher or caretaker doesn't assist them.

Children in pre-primary classes or in ECD centers learn many new activities that enhance their growth and development. Non-school going children were clearly unable to reach their overall potential due to lack of stimulating environment in almost all areas of development except physical and motor development.

3.3.1 Development Assessment Measure (Component I)

A detailed analysis of the differences in mean scores of children from different schools, private-government and in rural, semi-urban and urban areas on different sub domain has been undertaken. Schools from rural, semi-urban and urban areas scored poorly in cognitive activities such as naming, identification of colours, animals, birds, vegetables, fruits, daily use item, matching, sorting, pre-arithmetic concepts as teachers or caregivers do not provide opportunities for developing these skills. Only one urban government school scored “good” because it had some activities of motor, language and cognitive development. Two urban private schools also scored “good” in conceptual curricular activities because school management, teacher and also parents from urban areas were aware of the importance of holistic development of the child.

Performance Items

Making the same pattern

Children were observed individually in the process of testing and assessing children’s activities and performances in the various domains for example making pattern from small pebbles and clubbing them together. Like in other areas here also private- urban school children scored highest because they had a lot of practices in different activities and other eye hand coordination work. Private urban school children made the patterns that I demonstrated perfectly in comparison to rural school children. Non-school going children were significantly lower in scores against school going children.

Table 22: Scores on *Pattern Making* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Making Same pattern	PRSC	PSUSC	-0.875	0.496	0.573
		PUSC	-2.250*	0.496	0
		GRSC	-1.083	0.496	0.308
		GSUSC	-1.667*	0.496	0.016
		GUSC	-1.333	0.496	0.106
		NSGC	0.363	0.419	0.977
	PSUSC	PRSC	0.875	0.496	0.573
		PUSC	-1.375	0.496	0.086
		GRSC	-0.208	0.496	1
		GSUSC	-0.792	0.496	0.684
		GUSC	-0.458	0.496	0.968
		NSGC	1.238	0.419	0.054
	PUSC	PRSC	2.250*	0.496	0
		PSUSC	1.375	0.496	0.086
		GRSC	1.167	0.496	0.225
		GSUSC	0.583	0.496	0.902
		GUSC	0.917	0.496	0.517
		NSGC	2.613*	0.419	0
	GRSC	PRSC	1.083	0.496	0.308
		PSUSC	0.208	0.496	1
		PUSC	-1.167	0.496	0.225
		GSUSC	-0.583	0.496	0.902
		GUSC	-0.25	0.496	0.999
		NSGC	1.446*	0.419	0.012
	GSUSC	PRSC	1.667*	0.496	0.016
		PSUSC	0.792	0.496	0.684
		PUSC	-0.583	0.496	0.902
		GRSC	0.583	0.496	0.902
		GUSC	0.333	0.496	0.994
		NSGC	2.030*	0.419	0
	GUSC	PRSC	1.333	0.496	0.106
		PSUSC	0.458	0.496	0.968
		PUSC	-0.917	0.496	0.517
		GRSC	0.25	0.496	0.999
		GSUSC	-0.333	0.496	0.994
		NSGC	1.696*	0.419	0.001
	NSGC	PRSC	-0.363	0.419	0.977
		PSUSC	-1.238	0.419	0.054
		PUSC	-2.613*	0.419	0
		GRSC	-1.446*	0.419	0.012
		GSUSC	-2.030*	0.419	0
		GUSC	-1.696*	0.419	0.001

Following Instruction

In following instructions, children were asked to touch ears, blink eyes, pretend to brush etc., Urban- private school children scored high because compared to rural private and government schools, urban school teachers made children practice these type of activities in the school. Though rural school teachers were ECD trained they did not use the new methods. They use traditional methods and the classroom environment and teaching learning materials were also not enough in the school. In Rural government schools there were no chart, pictures, modules, blocks and play materials in the classroom. There were only, blackboards, desks and benches. In two school there were teaching learning materials, which were prepared by teachers during the training period and they were just stored in the staff room. Because of all these reasons most of the government school children scored less in this categories.

Table 23: Scores on *Following Instructions* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Following Instruction	PRSC	PSUSC	0.542	0.436	0.877
		PUSC	-0.958	0.436	0.303
		GRSC	0.5	0.436	0.913
		GSUSC	-0.042	0.436	1
		GUSC	0.583	0.436	0.834
		NSGC	2.107*	0.369	0
	PSUSC	PRSC	-0.542	0.436	0.877
		PUSC	-1.500*	0.436	0.013
		GRSC	-0.042	0.436	1
		GSUSC	-0.583	0.436	0.834
		GUSC	0.042	0.436	1
		NSGC	1.565*	0.369	0.001
	PUSC	PRSC	0.958	0.436	0.303
		PSUSC	1.500*	0.436	0.013
		GRSC	1.458*	0.436	0.017
		GSUSC	0.917	0.436	0.357
		GUSC	1.542*	0.436	0.009
		NSGC	3.065*	0.369	0
	GRSC	PRSC	-0.5	0.436	0.913
		PSUSC	0.042	0.436	1

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
		PUSC	-1.458*	0.436	0.017
		GSUSC	-0.542	0.436	0.877
		GUSC	0.083	0.436	1
		NSGC	1.607*	0.369	0
	GSUSC	PRSC	0.042	0.436	1
		PSUSC	0.583	0.436	0.834
		PUSC	-0.917	0.436	0.357
		GRSC	0.542	0.436	0.877
		GUSC	0.625	0.436	0.784
		NSGC	2.149*	0.369	0
	GUSC	PRSC	-0.583	0.436	0.834
		PSUSC	-0.042	0.436	1
		PUSC	-1.542*	0.436	0.009
		GRSC	-0.083	0.436	1
		GSUSC	-0.625	0.436	0.784
		NSGC	1.524*	0.369	0.001
	NSGC	PRSC	-2.107*	0.369	0
		PSUSC	-1.565*	0.369	0.001
		PUSC	-3.065*	0.369	0
		GRSC	-1.607*	0.369	0
		GSUSC	-2.149*	0.369	0
		GUSC	-1.524*	0.369	0.001

Visual discrimination

In this category the child was tested and observed by their capacity of identifying the difference in the flash card drawing (cow, dog, cat, bird, coloured and uncoloured circles etc.). In this category many government school children also scored up to 12 which are 100%. Private school children also scored maximum 12 and lowest score was 4 same as government school. But on an average private school children scored better. In this category non school going children's maximum score was 9 out of 12 which is 75%.The minimum mark scored by non school going children was 4 .Only 2 children scored 4 and one child scored 9.

Table 24: Scores on *Visual Discrimination* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Visual Discrimination	PRSC	PSUSC	-0.708	0.497	0.788
		PUSC	-2.542*	0.497	0
		GRSC	-1.25	0.497	0.16
		GSUSC	-1.750*	0.497	0.01
		GUSC	-0.917	0.497	0.52
		NSGC	1.762*	0.42	0.001
	PSUSC	PRSC	0.708	0.497	0.788
		PUSC	-1.833*	0.497	0.005
		GRSC	-0.542	0.497	0.931
		GSUSC	-1.042	0.497	0.36
		GUSC	-0.208	0.497	1
		NSGC	2.470*	0.42	0
	PUSC	PRSC	2.542*	0.497	0
		PSUSC	1.833*	0.497	0.005
		GRSC	1.292	0.497	0.132
		GSUSC	0.792	0.497	0.687
		GUSC	1.625*	0.497	0.021
		NSGC	4.304*	0.42	0
	GRSC	PRSC	1.25	0.497	0.16
		PSUSC	0.542	0.497	0.931
		PUSC	-1.292	0.497	0.132
		GSUSC	-0.5	0.497	0.952
		GUSC	0.333	0.497	0.994
		NSGC	3.012*	0.42	0
	GSUSC	PRSC	1.750*	0.497	0.01
		PSUSC	1.042	0.497	0.36
		PUSC	-0.792	0.497	0.687
		GRSC	0.5	0.497	0.952
		GUSC	0.833	0.497	0.633
		NSGC	3.512*	0.42	0
	GUSC	PRSC	0.917	0.497	0.52
		PSUSC	0.208	0.497	1
		PUSC	-1.625*	0.497	0.021
		GRSC	-0.333	0.497	0.994
		GSUSC	-0.833	0.497	0.633
		NSGC	2.679*	0.42	0
	NSGC	PRSC	-1.762*	0.42	0.001
		PSUSC	-2.470*	0.42	0
		PUSC	-4.304*	0.42	0
		GRSC	-3.012*	0.42	0
		GSUSC	-3.512*	0.42	0
		GUSC	-2.679*	0.42	0

Classification

In this component children were given different things to arrange in categories. Flowers, buttons, pebbles were given and child had to group the buttons and pebbles in separate categories similarly a set of coloured discs were given and the child has to group the different coloured discs. In this category also few Government school children and non school going children scored high but their average scores was low compared to private schools as well as children going to government schools. Private school children in urban settings had the most experience with these activities.

Table 25: Scores on *Classification* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Classification	PRSC	PSUSC	-2.875*	0.547	0
		PUSC	-4.667*	0.547	0
		GRSC	-3.083*	0.547	0
		GSUSC	-3.958*	0.547	0
		GUSC	-2.667*	0.547	0
	PSUSC	NSGC	-0.357	0.462	0.987
		PRSC	2.875*	0.547	0
		PUSC	-1.792*	0.547	0.021
		GRSC	-0.208	0.547	1
		GSUSC	-1.083	0.547	0.43
	PUSC	GUSC	0.208	0.547	1
		NSGC	2.518*	0.462	0
		PRSC	4.667*	0.547	0
		PSUSC	1.792*	0.547	0.021
		GRSC	1.583	0.547	0.063
	GRSC	GSUSC	0.708	0.547	0.854
		GUSC	2.000*	0.547	0.006
		NSGC	4.310*	0.462	0
		PRSC	3.083*	0.547	0
		PSUSC	0.208	0.547	1
		PUSC	-1.583	0.547	0.063
		GSUSC	-0.875	0.547	0.683
		GUSC	0.417	0.547	0.988
		NSGC	2.726*	0.462	0

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
	GSUSC	PRSC	3.958*	0.547	0
		PSUSC	1.083	0.547	0.43
		PUSC	-0.708	0.547	0.854
		GRSC	0.875	0.547	0.683
		GUSC	1.292	0.547	0.221
		NSGC	3.601*	0.462	0
	GUSC	PRSC	2.667*	0.547	0
		PSUSC	-0.208	0.547	1
		PUSC	-2.000*	0.547	0.006
		GRSC	-0.417	0.547	0.988
		GSUSC	-1.292	0.547	0.221
		NSGC	2.310*	0.462	0
	NSGC	PRSC	0.357	0.462	0.987
		PSUSC	-2.518*	0.462	0
		PUSC	-4.310*	0.462	0
		GRSC	-2.726*	0.462	0
		GSUSC	-3.601*	0.462	0
		GUSC	-2.310*	0.462	0

Number concept

In this component children were asked to perform those things which were related counting and number concept. For example children have to put stones or pebble on the table or on my hand according to instructions. Counting was up to 20 in this category school going children were verbally able to count up to 50 but when I asked them to give 7 stones or pencils they were confused. With counting up to three they were confident. But non school going children were not able to perform correctly in counting things. Very few urban private school children scored 5 and 6 out of 8. The average score of private school children was 2.75 only. Non school going children's average score was 0.73 and government school children's average score was 2.08.

Table 26: Scores on *Number Concept* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Number Concept	PRSC	PSUSC	-0.417	0.319	0.848
		PUSC	-0.708	0.319	0.289
		GRSC	0.375	0.319	0.902
		GSUSC	-0.167	0.319	0.999
		GUSC	-0.042	0.319	1
		NSGC	1.310*	0.27	0
	PSUSC	PRSC	0.417	0.319	0.848
		PUSC	-0.292	0.319	0.97
		GRSC	0.792	0.319	0.171
		GSUSC	0.25	0.319	0.986
		GUSC	0.375	0.319	0.902
		NSGC	1.726*	0.27	0
	PUSC	PRSC	0.708	0.319	0.289
		PSUSC	0.292	0.319	0.97
		GRSC	1.083*	0.319	0.014
		GSUSC	0.542	0.319	0.618
		GUSC	0.667	0.319	0.362
		NSGC	2.018*	0.27	0
	GRSC	PRSC	-0.375	0.319	0.902
		PSUSC	-0.792	0.319	0.171
		PUSC	-1.083*	0.319	0.014
		GSUSC	-0.542	0.319	0.618
		GUSC	-0.417	0.319	0.848
		NSGC	.935*	0.27	0.011
	GSUSC	PRSC	0.167	0.319	0.999
		PSUSC	-0.25	0.319	0.986
		PUSC	-0.542	0.319	0.618
		GRSC	0.542	0.319	0.618
		GUSC	0.125	0.319	1
		NSGC	1.476*	0.27	0
	GUSC	PRSC	0.042	0.319	1
		PSUSC	-0.375	0.319	0.902
		PUSC	-0.667	0.319	0.362
		GRSC	0.417	0.319	0.848
		GSUSC	-0.125	0.319	1
		NSGC	1.351*	0.27	0
	NSGC	PRSC	-1.310*	0.27	0
		PSUSC	-1.726*	0.27	0
		PUSC	-2.018*	0.27	0
		GRSC	-.935*	0.27	0.011
		GSUSC	-1.476*	0.27	0
		GUSC	-1.351*	0.27	0

Visual memory (Discrimination)

In the visual memory task, objects were placed in front of the child and after the child had seen them they were asked to close their eyes. At that time I removed one object and ask him/her to say the name of removed object. In the beginning objects were only 3 after it was increased up to 7. In this component average score were 6.71, 5.88 and 5.3 private school children, government school children and non school going children respectively. Private school children scored a little bit higher because in few school children had chances to practice this type of class room activities in the school.

Table 27: Scores on *Visual Memory* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Visual Memory	PRSC	PSUSC	-1.917*	0.444	0.001
		PUSC	-2.833*	0.444	0
		GRSC	-2.417*	0.444	0
		GSUSC	-2.333*	0.444	0
		GUSC	-2.000*	0.444	0
	PSUSC	NSGC	-1.429*	0.375	0.004
		PRSC	1.917*	0.444	0.001
		PUSC	-0.917	0.444	0.379
		GRSC	-0.5	0.444	0.92
		GSUSC	-0.417	0.444	0.966
	PUSC	GUSC	-0.083	0.444	1
		NSGC	0.488	0.375	0.851
		PRSC	2.833*	0.444	0
		PSUSC	0.917	0.444	0.379
		GRSC	0.417	0.444	0.966
	GRSC	GSUSC	0.5	0.444	0.92
		GUSC	0.833	0.444	0.499
		NSGC	1.405*	0.375	0.004
		PRSC	2.417*	0.444	0
		PSUSC	0.5	0.444	0.92
	GSUSC	PUSC	-0.417	0.444	0.966
		GRSC	0.083	0.444	1
		GUSC	0.417	0.444	0.966
		NSGC	0.988	0.375	0.122
		PRSC	2.333*	0.444	0

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
		PSUSC	0.417	0.444	0.966
		PUSC	-0.5	0.444	0.92
		GRSC	-0.083	0.444	1
		GUSC	0.333	0.444	0.989
		NSGC	0.905	0.375	0.2
	GUSC	PRSC	2.000*	0.444	0
		PSUSC	0.083	0.444	1
		PUSC	-0.833	0.444	0.499
		GRSC	-0.417	0.444	0.966
		GSUSC	-0.333	0.444	0.989
		NSGC	0.571	0.375	0.731
	NSGC	PRSC	1.429*	0.375	0.004
		PSUSC	-0.488	0.375	0.851
		PUSC	-1.405*	0.375	0.004
		GRSC	-0.988	0.375	0.122
		GSUSC	-0.905	0.375	0.2
		GUSC	-0.571	0.375	0.731

Temporal Relationship

In the temporal relationship component rural private and government school children scored low compared to private urban schools. It was because the schools from rural area did not give any guidance to the children to practice, matching, do puzzles, ordering or arranging things or pictures according to sequences. When I asked the children to arrange the picture according to sequence of eating banana, water filling in the bucket, and the melting candle they were confused. First of all they did not understand the instruction that is meaning of sequences in the picture. Although they knew that it was a candle, bucket and banana. In private- urban school, children easily put the pictures according to the sequence because they used to practice similar types of activities in the classrooms. They were familiar with different types of puzzles also. The importance of familiarity with the task assigned cannot be undermined. Children when familiar with the vocabulary and the use of it in appropriate following of instructions did well in the assessment process.

Table 28: Scores on *Temporal Relationship* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Temporal relationship	PRSC	PSUSC	-2.083*	0.409	0
		PUSC	-2.750*	0.409	0
		GRSC	-2.417*	0.409	0
		GSUSC	-2.542*	0.409	0
		GUSC	-1.625*	0.409	0.002
	PSUSC	NSGC	-1.952*	0.345	0
		PRSC	2.083*	0.409	0
		PUSC	-0.667	0.409	0.662
		GRSC	-0.333	0.409	0.983
		GSUSC	-0.458	0.409	0.921
	PUSC	GUSC	0.458	0.409	0.921
		NSGC	0.131	0.345	1
		PRSC	2.750*	0.409	0
		PSUSC	0.667	0.409	0.662
		GRSC	0.333	0.409	0.983
	GRSC	GSUSC	0.208	0.409	0.999
		GUSC	1.125	0.409	0.091
		NSGC	0.798	0.345	0.244
		PRSC	2.417*	0.409	0
		PSUSC	0.333	0.409	0.983
	GSUSC	PUSC	-0.333	0.409	0.983
		GRSC	-0.125	0.409	1
		GUSC	0.792	0.409	0.458
		NSGC	0.464	0.345	0.83
		PRSC	2.542*	0.409	0
	GUSC	PSUSC	0.458	0.409	0.921
		PUSC	-0.208	0.409	0.999
		GRSC	0.125	0.409	1
		GUSC	0.917	0.409	0.277
		NSGC	0.589	0.345	0.612
	NSGC	PRSC	1.625*	0.409	0.002
		PSUSC	-0.458	0.409	0.921
		PUSC	-1.125	0.409	0.091
		GRSC	-0.792	0.409	0.458
		GSUSC	-0.917	0.409	0.277
		NSGC	-0.327	0.345	0.964
		PRSC	1.952*	0.345	0
		PSUSC	-0.131	0.345	1

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
		PUSC	-0.798	0.345	0.244
		GRSC	-0.464	0.345	0.83
		GSUSC	-0.589	0.345	0.612
		GUSC	0.327	0.345	0.964

Auditory memory

In this component the children have to listen carefully to perform the task. After hearing the researcher the child has to make the sequences. Researcher arranged 3-6 objects in a sequence as called out like soap, spoon, and comb. Then the child is asked to make the sequences. In this component also urban private school children scored high, though the differences were not very much. Private rural school children's average score was lowest that is 4.00 and highest was 6.71 from private urban school children

Table 29: Scores on Auditory Memory in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Auditory Memory	PRSC	PSUSC	-1.792*	0.386	0
		PUSC	-2.708*	0.386	0
		GRSC	-1.958*	0.386	0
		GSUSC	-2.458*	0.386	0
		GUSC	-1.875*	0.386	0
	PSUSC	NSGC	-1.214*	0.327	0.005
		PRSC	1.792*	0.386	0
		PUSC	-0.917	0.386	0.216
		GRSC	-0.167	0.386	0.999
		GSUSC	-0.667	0.386	0.6
	PUSC	GUSC	-0.083	0.386	1
		NSGC	0.577	0.327	0.571
		PRSC	2.708*	0.386	0
		PSUSC	0.917	0.386	0.216

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
		GRSC	0.75	0.386	0.456
		GSUSC	0.25	0.386	0.995
		GUSC	0.833	0.386	0.324
		NSGC	1.494*	0.327	0
	GRSC	PRSC	1.958*	0.386	0
		PSUSC	0.167	0.386	0.999
		PUSC	-0.75	0.386	0.456
		GSUSC	-0.5	0.386	0.854
		GUSC	0.083	0.386	1
		NSGC	0.744	0.327	0.26
	GSUSC	PRSC	2.458*	0.386	0
		PSUSC	0.667	0.386	0.6
		PUSC	-0.25	0.386	0.995
		GRSC	0.5	0.386	0.854
		GUSC	0.583	0.386	0.739
		NSGC	1.244*	0.327	0.003
	GUSC	PRSC	1.875*	0.386	0
		PSUSC	0.083	0.386	1
		PUSC	-0.833	0.386	0.324
		GRSC	-0.083	0.386	1
		GSUSC	-0.583	0.386	0.739
		NSGC	0.661	0.327	0.404
	NSGC	PRSC	1.214*	0.327	0.005
		PSUSC	-0.577	0.327	0.571
		PUSC	-1.494*	0.327	0
		GRSC	-0.744	0.327	0.26
		GSUSC	-1.244*	0.327	0.003
		GUSC	-0.661	0.327	0.404

Verbal Items

Language is a complex and important area in child development. It serves as a means of communication and major means of transforming our culture to the next generation. Language takes a number of forms like oral, written, art, gesture, facial

expression body language or physical position. Any system of signs used for communication is language. Language is a form of communication, whether spoken, written or sign language. We need language to speak or communicate with others and listen to others. Language encompasses every means of communication in which thoughts and feelings are symbolized so as to convey meaning to others. Language seems to be innate characteristics of humankind (Gordon, 2004). In particular, researchers have found that the quantity of talk that parents direct to their children is linked with the child's vocabulary growth and the quantity of talk is also linked to the socioeconomic status of the family (W. Santrock, 2007). In a study the researchers found a remarkable link between the size of a child's vocabulary and the talkativeness of his/her mother. The mothers varied as much as tenfold in how much they talked. The toddler of the most talkative mother had a vocabulary more than four times the size of the vocabulary of the child with the quietest mother (W. Santrock, 2007).

Children vary in their ability to acquire language and this variance can not be explained by differences in environmental input alone. Children whose parents provide them with a rich verbal environment show many positive benefits. Parents who pay attention to what their children are trying to say, and expand their children's utterance, read to them and label things in the environment are providing valuable (J. Berko, 2005). When a child starts to go to pre-school or ECD centre he/she improves more in language abilities.

Information

In this item, all children's responses were excellent. Even non school going children's responses were much better in comparison to their performances on other components. They scored 58.33% on an average and the highest score was 79.97% which was scored by urban school children. In this component I asked the child his/her name, nick name, parents and friend's name, body parts etc. many situational questions were also asked. In the manual there were questions like what lives in water? What ears, nose and mouth are for? How many legs does a dog /horse/cow have? What are the ingredients for cooking dal?

Table 30: Scores on *Information* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Information	PRSC	PSUSC	-0.417	1.25	1
		PUSC	-2.667	1.25	0.338
		GRSC	-1.958	1.25	0.704
		GSUSC	-1.917	1.25	0.725
		GUSC	-1.333	1.25	0.937
	PSUSC	NSGC	4.202*	1.057	0.002
		PRSC	0.417	1.25	1
		PUSC	-2.25	1.25	0.55
		GRSC	-1.542	1.25	0.88
		GSUSC	-1.5	1.25	0.894
	PUSC	GUSC	-0.917	1.25	0.99
		NSGC	4.619*	1.057	0
		PRSC	2.667	1.25	0.338
		PSUSC	2.25	1.25	0.55
		GRSC	0.708	1.25	0.998
	GRSC	GSUSC	0.75	1.25	0.997
		GUSC	1.333	1.25	0.937
		NSGC	6.869*	1.057	0
		PRSC	1.958	1.25	0.704
		PSUSC	1.542	1.25	0.88
	GSUSC	PUSC	-0.708	1.25	0.998
		GSUSC	0.042	1.25	1
		GUSC	0.625	1.25	0.999
		NSGC	6.161*	1.057	0
		PRSC	1.917	1.25	0.725
	GUSC	PSUSC	1.5	1.25	0.894
		PUSC	-0.75	1.25	0.997
		GRSC	-0.042	1.25	1
		GUSC	0.583	1.25	0.999
		NSGC	6.119*	1.057	0
	NSGC	PRSC	1.333	1.25	0.937
		PSUSC	0.917	1.25	0.99
		PUSC	-1.333	1.25	0.937
		GRSC	-0.625	1.25	0.999
		GSUSC	-0.583	1.25	0.999
		NSGC	5.536*	1.057	0
		PRSC	-4.202*	1.057	0.002
		PSUSC	-4.619*	1.057	0
		PUSC	-6.869*	1.057	0
		GRSC	-6.161*	1.057	0
		GSUSC	-6.119*	1.057	0
		GUSC	-5.536*	1.057	0

Table 31 shows the scores obtained in information component by rural, semi-urban, urban and non school going children. Statistically there was no significant difference between the average scores on this information item in the various school going children

Table 31: Score and average of Information Item

Information		
Code	Average score	Percentage
MM	36	%
PRSC	25.00	69.44
PSUSC	25.53	70.91
PUSC	28.79	79.97
GRSC	27.38	76.05
GSUSC	27.33	75.91
GRSC	26.75	72.22
NSGC	21.2	58.33

Verbal Problem Solving

In verbal items children were asked different questions related to their daily life. For example what do you do when you feel cold? What do you do when you are hungry? In this item all school going and non going children response scored minimum 12.2 and that was 76.25%. Highest score was 13.71 that are 75.61%. In this item also there was no significant difference among school going and non school going children.

Table 32: Scores on Verbal Problem Solving in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Verbal Problem solving	PRSC	PSUSC	0.042	0.578	1
		PUSC	-0.792	0.578	0.818
		GRSC	0.708	0.578	0.884
		GSUSC	-0.083	0.578	1
		GUSC	0	0.578	1
	PSUSC	NSGC	0.756	0.489	0.716
		PRSC	-0.042	0.578	1
		PUSC	-0.833	0.578	0.779
		GRSC	0.667	0.578	0.911
		GSUSC	-0.125	0.578	1
	PUSC	GUSC	-0.042	0.578	1
		NSGC	0.714	0.489	0.767
		PRSC	0.792	0.578	0.818
		PSUSC	0.833	0.578	0.779
		GRSC	1.5	0.578	0.134
	GRSC	GSUSC	0.708	0.578	0.884
		GUSC	0.792	0.578	0.818
		NSGC	1.548*	0.489	0.029
		PRSC	-0.708	0.578	0.884
		PSUSC	-0.667	0.578	0.911
	GSUSC	PUSC	-1.5	0.578	0.134
		GRSC	-0.792	0.578	0.818
		GUSC	-0.708	0.578	0.884
		NSGC	0.048	0.489	1
		PRSC	0.083	0.578	1
	GUSC	PSUSC	0.125	0.578	1
		PUSC	-0.708	0.578	0.884
		GRSC	0.792	0.578	0.818
		GUSC	0.083	0.578	1
		NSGC	0.839	0.489	0.606
		PRSC	0	0.578	1
		PSUSC	0.042	0.578	1
		PUSC	-0.792	0.578	0.818
		GRSC	0.708	0.578	0.884
		GSUSC	-0.083	0.578	1
		NSGC	0.756	0.489	0.716

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
	NSGC	PRSC	-0.756	0.489	0.716
		PSUSC	-0.714	0.489	0.767
		PUSC	-1.548*	0.489	0.029
		GRSC	-0.048	0.489	1
		GSUSC	-0.839	0.489	0.606
		GUSC	-0.756	0.489	0.716

Arithmetic Reasoning

In arithmetic reasoning all children were poor. Children from private semi urban school could perform one to 20 counting easily. Some of them counted up to 50 in English but in Nepali only up to twenty. When I ask them to give 5 pencils, 3 stones and the things around them they could not give me the exact number. They had concept of one, two and three but after that they do not have of the notion of the number. Children used to rote learn in a melodic form one, two, three, four..... but they did not know the exact numbers. Children from rural schools recognized Rs. 5 and 10. A few children also recognized the Rs. 100 note. But children from urban school were confused about the value of Rs. 5, 10, and 100. In rural areas children use to go to shop with their parent's or elders so they know the value of money but children from urban generally get the things, what they demand like sweets, instant noodles, cheese ball, potato-chips , doll or play materials, from their parents. They did not get chance to go shopping with parents or elders to grocery shops. Because of lots of vehicles on the road and because of other factors (kidnapping etc.) children in urban areas were not allowed to go to the neighborhood grocery shops. In this item all the questions were related to arithmetic. For example if you have six bananas and you give me four of them how many bananas would you have then?

In this component all children scored low because all the children were unable to give the number concept clearly.

Table 33: Scores on Arithmetic Reasoning in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Arithmetic Reasoning	PRSC	PSUSC	0.083	0.541	1
		PUSC	0.792	0.541	0.766
		GRSC	3.250*	0.541	0
		GSUSC	2.375*	0.541	0
		GUSC	2.333*	0.541	0.001
	PSUSC	NSGC	3.530*	0.457	0
		PRSC	-0.083	0.541	1
		PUSC	0.708	0.541	0.847
		GRSC	3.167*	0.541	0
		GSUSC	2.292*	0.541	0.001
	PUSC	GUSC	2.250*	0.541	0.001
		NSGC	3.446*	0.457	0
		PRSC	-0.792	0.541	0.766
		PSUSC	-0.708	0.541	0.847
		GRSC	2.458*	0.541	0
	GRSC	GSUSC	1.583	0.541	0.058
		GUSC	1.542	0.541	0.071
		NSGC	2.738*	0.457	0
		PRSC	-3.250*	0.541	0
		PSUSC	-3.167*	0.541	0
	GSUSC	PUSC	-2.458*	0.541	0
		GRSC	-0.875	0.541	0.671
		GUSC	-0.917	0.541	0.62
		NSGC	0.28	0.457	0.996
		PRSC	-2.375*	0.541	0
	GUSC	PSUSC	-2.292*	0.541	0.001
		PUSC	-1.583	0.541	0.058
		GRSC	0.875	0.541	0.671
		GUSC	-0.042	0.541	1
		NSGC	1.155	0.457	0.155
	NSGC	PRSC	-2.333*	0.541	0.001
		PSUSC	-2.250*	0.541	0.001
		PUSC	-1.542	0.541	0.071
		GRSC	0.917	0.541	0.62
		GSUSC	0.042	0.541	1
		NSGC	1.196	0.457	0.126
		PRSC	-3.530*	0.457	0

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
		PSUSC	-3.446*	0.457	0
		PUSC	-2.738*	0.457	0
		GRSC	-0.28	0.457	0.996
		GSUSC	-1.155	0.457	0.155
		GUSC	-1.196	0.457	0.126

Analogies

In this component children have to response with reasoning. For example children were asked-an elephant is big and a mouse is....? , we sleep at night and wake up in the, Ice is cold and fire isChild has to complete the sentences. In this item nonschool going children scored low. For non school going children some picture card was not much familiar and some questions they responded very slowly. The school going children answered correctly and confidently.

Table 34: Scores on *Analogies* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Analogies	PRSC	PSUSC	0.167	0.646	1
		PUSC	-0.25	0.646	1
		GRSC	0.833	0.646	0.856
		GSUSC	-0.25	0.646	1
		GUSC	-0.5	0.646	0.987
		NSGC	4.488*	0.546	0
	PSUSC	PRSC	-0.167	0.646	1
		PUSC	-0.417	0.646	0.995
		GRSC	0.667	0.646	0.946
		GSUSC	-0.417	0.646	0.995
		GUSC	-0.667	0.646	0.946
		NSGC	4.321*	0.546	0
	PUSC	PRSC	0.25	0.646	1
		PSUSC	0.417	0.646	0.995
		GRSC	1.083	0.646	0.632
		GSUSC	0	0.646	1
		GUSC	-0.25	0.646	1

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
		NSGC	4.738*	0.546	0
	GRSC	PRSC	-0.833	0.646	0.856
		PSUSC	-0.667	0.646	0.946
		PUSC	-1.083	0.646	0.632
		GSUSC	-1.083	0.646	0.632
		GUSC	-1.333	0.646	0.378
		NSGC	3.655*	0.546	0
	GSUSC	PRSC	0.25	0.646	1
		PSUSC	0.417	0.646	0.995
		PUSC	0	0.646	1
		GRSC	1.083	0.646	0.632
		GUSC	-0.25	0.646	1
		NSGC	4.738*	0.546	0
	GUSC	PRSC	0.5	0.646	0.987
		PSUSC	0.667	0.646	0.946
		PUSC	0.25	0.646	1
		GRSC	1.333	0.646	0.378
		GSUSC	0.25	0.646	1
		NSGC	4.988*	0.546	0
	NSGC	PRSC	-4.488*	0.546	0
		PSUSC	-4.321*	0.546	0
		PUSC	-4.738*	0.546	0
		GRSC	-3.655*	0.546	0
		GSUSC	-4.738*	0.546	0
		GUSC	-4.988*	0.546	0

Action Agent

In this item children were asked questions and they had to answer. For example the questions were asked, “What barks?, What flies? What blooms?” etc. All the children scored more than 70% in this component. Non school going children scored higher than private rural school children. In private rural school children’s average score was 73.58 %and Non school going children’s average score was 9.43 that is 78.58 %.

Table 35: Scores on *Action Agent* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Action agent	PRSC	PSUSC	-1.083	0.482	0.276
		PUSC	-1.667*	0.482	0.012
		GRSC	-1.958*	0.482	0.001
		GSUSC	-2.458*	0.482	0
		GUSC	-1.417	0.482	0.056
	PSUSC	NSGC	-0.595	0.407	0.768
		PRSC	1.083	0.482	0.276
		PUSC	-0.583	0.482	0.89
		GRSC	-0.875	0.482	0.54
		GSUSC	-1.375	0.482	0.071
	PUSC	GUSC	-0.333	0.482	0.993
		NSGC	0.488	0.407	0.894
		PRSC	1.667*	0.482	0.012
		PSUSC	0.583	0.482	0.89
		GRSC	-0.292	0.482	0.997
	GRSC	GSUSC	-0.792	0.482	0.655
		GUSC	0.25	0.482	0.999
		NSGC	1.071	0.407	0.123
		PRSC	1.958*	0.482	0.001
		PSUSC	0.875	0.482	0.54
	GSUSC	PUSC	0.292	0.482	0.997
		GSUSC	-0.5	0.482	0.945
		GUSC	0.542	0.482	0.92
		NSGC	1.363*	0.407	0.017
		PRSC	2.458*	0.482	0
	GUSC	PSUSC	1.375	0.482	0.071
		PUSC	0.792	0.482	0.655
		GRSC	0.5	0.482	0.945
		GUSC	1.042	0.482	0.322
		NSGC	1.863*	0.407	0
	NSGC	PRSC	1.417	0.482	0.056
		PSUSC	0.333	0.482	0.993
		PUSC	-0.25	0.482	0.999
		GRSC	-0.542	0.482	0.92
		GSUSC	-1.042	0.482	0.322
		NSGC	0.821	0.407	0.408
		PRSC	0.595	0.407	0.768
		PSUSC	-0.488	0.407	0.894
		PUSC	-1.071	0.407	0.123
		GRSC	-1.363*	0.407	0.017
		GSUSC	-1.863*	0.407	0
		GUSC	-0.821	0.407	0.408

Story Recall Sequence

In this item the researcher had to narrate a story slowly and clearly to the child and ask questions related to story. In this component the children responded very eagerly and correctly. Non school going scored 72.50% and the highest marks obtained by urban school children was 89.61%.

Table 36: Scores on *Story Recall Sequence* in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Story recall	PRSC	PSUSC	1.458	0.53	0.091
		PUSC	-0.208	0.53	1
		GRSC	1.25	0.53	0.222
		GSUSC	0.75	0.53	0.793
		GUSC	1.167	0.53	0.3
	PSUSC	NSGC	2.863*	0.448	0
		PRSC	-1.458	0.53	0.091
		PUSC	-1.667*	0.53	0.031
		GRSC	-0.208	0.53	1
		GSUSC	-0.708	0.53	0.834
	PUSC	GUSC	-0.292	0.53	0.998
		NSGC	1.405*	0.448	0.032
		PRSC	0.208	0.53	1
		PSUSC	1.667*	0.53	0.031
		GRSC	1.458	0.53	0.091
	GRSC	GSUSC	0.958	0.53	0.544
		GUSC	1.375	0.53	0.133
		NSGC	3.071*	0.448	0
		PRSC	-1.25	0.53	0.222
		PSUSC	0.208	0.53	1
	GSUSC	PUSC	-1.458	0.53	0.091
		GRSC	-0.5	0.53	0.965
		GUSC	-0.083	0.53	1
		NSGC	1.613*	0.448	0.007
		PRSC	-0.75	0.53	0.793
		PSUSC	0.708	0.53	0.834
		PUSC	-0.958	0.53	0.544
		GRSC	0.5	0.53	0.965
		GUSC	0.417	0.53	0.986
		NSGC	2.113*	0.448	0

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
	GUSC	PRSC	-1.167	0.53	0.3
		PSUSC	0.292	0.53	0.998
		PUSC	-1.375	0.53	0.133
		GRSC	0.083	0.53	1
		GSUSC	-0.417	0.53	0.986
		NSGC	1.696*	0.448	0.004
	NSGC	PRSC	-2.863*	0.448	0
		PSUSC	-1.405*	0.448	0.032
		PUSC	-3.071*	0.448	0
		GRSC	-1.613*	0.448	0.007
		GSUSC	-2.113*	0.448	0
		GUSC	-1.696*	0.448	0.004

In Development Assessment Measure I urban school going children's average score is higher, because in urban schools, according to school curriculum, there are lots of class work and home work for the children and children have to read and write and do many other activities. Further in semi-urban schools, children have to learn lot of things as compared to rural schools. Non school going children's exposure with tasks in the measure was low and thus in the development assessment measures it was reflected as very low compared to school going children. Therefore, naturally non school going children lacked in different activities and there was significant difference among all school going children and non school going children.

3.3.2 Development Assessment Measure II

Physical Motor Development

Result were significant in each area for school going and non school going children in fine motor development, social emotional development, self help skills and overall development assessment measurements. Non- school going children were able to run, jump, climb, catch, throw, skip, hoop, and balance easily so there is no significant difference in physical development among non-school going children and school going children from both government and private school. But in fine motor skills there were a variety of activities in school like-threading beads, painting,

coloring, pasting, writing, and cutting. School going children scored higher due to the fact that in school children have an opportunity to participate in a variety of activities.

Physical development provides children the abilities they need to explore and interact with world around them. A young child's physical ability first begins with muscular gain in strength then children gradually develop coordination muscles and eyes. The growths of young children's physical abilities are amazing. According to age they start crawling, rolling over, holding objects, running, jumping, grasping, drawing, coloring etc.

The term motor development refers to physical growth in the ability of children to use their bodies and physical skills. Motor development often has been defined as the process by which a child acquires movement pattern and different types of skills. Genetics, size at birth, body build and composition, nutrition, birth order, rearing pattern, social status (social class), ethnicity and culture influence motor development.

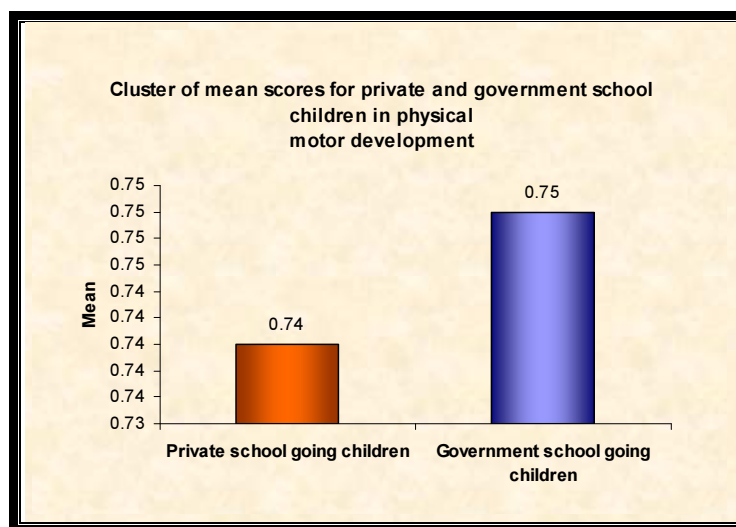
While talking about physical development we should understand the word gross-motor development and fine-motor development. Gross-motor development refers to the use of large- muscles groups in the arm and legs it includes walking, running, jumping, hooping, throwing, lifting, kicking, walk on toes, animal walks (elephant horse, rabbit, dog frog leap etc). Gross motor development gives the child the ability to move in a variety of ways, and ability to control their body activities and help to promote child's self esteem. Fine-motor development includes fine activities of muscles such as-picking up small things, grasping cereals, tying a shoe-lace etc.

The early years of a child's life are very much important for their development. Teacher and parents are integral part of learning process. The child's identity will shape in early years through early childhood development education which is possible from ECD centers or pre primary classes (PPCs) at school and parents and guardians in the family. Physical development comprise of the development of the body structure, sensory development, motor development and the nervous system's coordination of perception which includes the sensory development

of vision, hearing, taste, touch and smell. Attention and affection will build the child's emotional wellness, while age appropriate fitness, rest and activities will provide a healthy body and strong mind. Parents and teachers can play an active role in their children's development. The concept of developmental appropriateness has three dimensions: age appropriateness, individual appropriateness and cultural appropriateness. Age appropriateness is based on research which indicates that there are universal, predictable sequences of growth and change that occur in children during the first nine years of life. Individually appropriateness recognizes that each child is unique person with individual pattern and timing growth, as well as an individual personality, learning style, and family background. Cultural appropriateness recognize the importance of the knowledge of social and cultural context in which children live to ensure that learning experiences are meaningful, relevant and respectful for the children and their families.(Tots, 2004)

An environment that encourages exploration and physical development is important for children of all ages. We should allow our children plenty of space for rolling, crawling, hooping running, motor development is the most visible of children's innate abilities. It is seen by others and judge by others easily. Motor development is the progressive change in movement throughout the life cycle and motor development only happens when the child is biologically and mentally ready for it. Children need opportunities to develop upper body strength by rolling, throwing, and pulling themselves up, hanging and swinging, and they need opportunities to strengthen their lower bodies by running, jumping, and balancing. We (adults) should encourage the children to try variety of physical activities to give opportunities for the development of large and small muscle skills and for that purpose children need lots of time and space. Motor development progresses from gross motor skills to fine skills. Working and playing with crayons, stringing beads, puzzles works etc are good for children's fine-motor skills development and eye-hand coordination.

Figure 11: Mean scores of Private and government school children. Physical Motor Developments



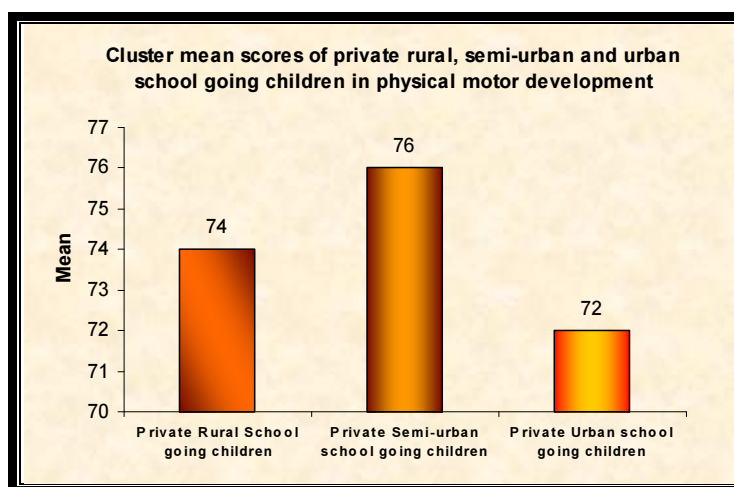
There is no significant difference in private and government school going children regarding the performance of physical motor development. Government schools have their own building and enough play ground compare to private schools. In semi-urban government schools, the number of students compared to the class room space is not enough. However, for the small children it is sufficient and teachers can manage time for outdoor play. Children are free to jump, run and play at school compare to private school. In government schools there is no school bus; children have to walk 15-45 minutes to reach school. This also makes a lot of balance for the physical activities.

In this area of there was no significant different between schools of different areas and even no significant difference between non school going children. In this area the indicator walking, creeping, jumping, rolling, catching, kicking, climbing etc were included. Most of children were able to do all these kind of physical activities.

Table 37: Scores on Physical-Motor in different School going and Non-school going Children

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Physical motor development	PRSC	PSUSC	-2.125	2.537	0.981
		PUSC	2	2.537	0.986
		GRSC	-1.75	2.537	0.993
		GSUSC	-2.708	2.537	0.937
		GUSC	-1.125	2.537	0.999
	PSUSC	NSGC	-1.56	2.144	0.991
		PRSC	2.125	2.537	0.981
		PUSC	4.125	2.537	0.666
		GRSC	0.375	2.537	1
		GSUSC	-0.583	2.537	1
	PUSC	GUSC	1	2.537	1
		NSGC	0.565	2.144	1
		PRSC	-2	2.537	0.986
		PSUSC	-4.125	2.537	0.666
		GRSC	-3.75	2.537	0.758
	GRSC	GSUSC	-4.708	2.537	0.512
		GUSC	-3.125	2.537	0.881
		NSGC	-3.56	2.144	0.643
		PRSC	1.75	2.537	0.993
		PSUSC	-0.375	2.537	1
	GSUSC	PUSC	3.75	2.537	0.758
		GRSC	-0.958	2.537	1
		GUSC	0.625	2.537	1
		NSGC	0.19	2.144	1
		PRSC	2.708	2.537	0.937
	GUSC	PSUSC	0.583	2.537	1
		PUSC	4.708	2.537	0.512
		GRSC	0.958	2.537	1
		GUSC	1.583	2.537	0.996
		NSGC	1.149	2.144	0.998
	NSGC	PRSC	1.125	2.537	0.999
		PSUSC	-1	2.537	1
		PUSC	3.125	2.537	0.881
		GRSC	-0.625	2.537	1
		GSUSC	-1.583	2.537	0.996
		NSGC	-0.435	2.144	1
		PRSC	1.56	2.144	0.991
		PSUSC	-0.565	2.144	1
		PUSC	3.56	2.144	0.643
		GRSC	-0.19	2.144	1
		GSUSC	-1.149	2.144	0.998
		GUSC	0.435	2.144	1

Figure 12: Physical Motor Development



There is no significant difference in private semi-urban and urban school going children. In private semi-urban schools, children are free for physical movement and activities. They are not controlled by teacher all the time like in urban private schools. In urban private schools, the teachers have to be very careful about conducting different physical activities. It is because of this reason that children have less physical activities at school. However, in semi-urban private schools most of the children come to school by walking unlike in urban schools where children come to school by bus. So the urban children have less physical movement compared to semi-urban children. Because of less physical movement and activities at home and school, urban private school children scored less than semi-urban school children in the physical motor activities. Private Semi-urban school children also have more space and time for physical movement and activities at home compared to urban children. They play with friends outside their homes but urban children instead of playing tend to attend a tuition classes after school and also have to do a lot of home work.

Fine Motor Skills

Fine motor skills can be defined as small muscle movement: those that occur in muscles of finger in coordination with eyes. Fine motor skills don't develop over-night, but develop with time and practice. Teaching fine motor skills requires patience and understanding, painting ,drawing ,cutting, construction of building blocks are the activities which can be used in school and home for the motor development of a child.

Some of the most important development tasks of preschool and early school year consist of the development of motor skills based on the coordination of muscles of the body structure. Motor development refers to the development of control over movement through the coordinated activities of nerves and muscles. Childhood is often called the “ideal age “for learning especially motor skills because children’s bodies are pliable, they enjoy learning and repetition make greater proficiency in skills in which they have received guidance from adult.

Table 38: Scores on *Fine Motor* in different School going and Non-school going Children

Task	Code of children (I)	Code of children (J)	Mean Difference (I-J)	Std. Error	Sig.
Fine motor development	PRSC	PSUSC	0	1.631	1
		PUSC	-7.125*	1.631	0
		GRSC	-4.75	1.631	0.06
		GSUSC	-6.792*	1.631	0.001
		GUSC	-3.125	1.631	0.472
		NSGC	5.607*	1.378	0.001
	PSUSC	PRSC	0	1.631	1
		PUSC	-7.125*	1.631	0
		GRSC	-4.75	1.631	0.06
		GSUSC	-6.792*	1.631	0.001
		GUSC	-3.125	1.631	0.472
		NSGC	5.607*	1.378	0.001
	PUSC	PRSC	7.125*	1.631	0
		PSUSC	7.125*	1.631	0
		GRSC	2.375	1.631	0.77
		GSUSC	0.333	1.631	1
		GUSC	4	1.631	0.183
		NSGC	12.732*	1.378	0
	GRSC	PRSC	4.75	1.631	0.06
		PSUSC	4.75	1.631	0.06
		PUSC	-2.375	1.631	0.77
		GSUSC	-2.042	1.631	0.873
		GUSC	1.625	1.631	0.954
		NSGC	10.357*	1.378	0
	GSUSC	PRSC	6.792*	1.631	0.001
		PSUSC	6.792*	1.631	0.001
		PUSC	-0.333	1.631	1

Task	Code of children (I)	Code of children (J)	Mean Difference (I-J)	Std. Error	Sig.
		GRSC	2.042	1.631	0.873
		GUSC	3.667	1.631	0.275
		NSGC	12.399*	1.378	0
	GUSC	PRSC	3.125	1.631	0.472
		PSUSC	3.125	1.631	0.472
		PUSC	-4	1.631	0.183
		GRSC	-1.625	1.631	0.954
		GSUSC	-3.667	1.631	0.275
		NSGC	8.732*	1.378	0
	NSGC	PRSC	-5.607*	1.378	0.001
		PSUSC	-5.607*	1.378	0.001
		PUSC	-12.732*	1.378	0
		GRSC	-10.357*	1.378	0
		GSUSC	-12.399*	1.378	0
		GUSC	-8.732*	1.378	0

While comparing government school children and private school children, in fine-motor skills, private urban school scored higher because there were a number of fine motor skill activities in the school. Non-school going children were significantly lower in scores due to non exposure.

In this area children were asked to put stiff wire through large and small hole, to draw outline and meaningful figures. They were asked to crumble and tear the papers. After observing their activities they were scored carefully. In this area of motor development there was a significant difference between school going and non school going children. There was significant difference between private urban school children and private rural school children and private semi urban school children. Government semi-urban school children scored better than private rural and semi urban children. In semi urban area the government school was trying to compete with semi urban private schools. If the government schools do better there is award provision. So the school was trying to attract more pre-school children by providing different activities in the school. In Nepal a school runs classes from Nursery to grade 10. If There are more children in pre-primary classes the school will be benefitted. Among the three semis -urban government school one school was doing much better in every area compared to other government schools. The pre-primary teachers were

also trained and were applying the child centered teaching methods. Therefore children in this area scored high.

Socio-Emotional development

Early Childhood is the most critical period for emotional development. In early childhood, the psychological development of a child is very rapid- at this stage in their lives brain is literally like sponge; it absorbs everything around it. Therefore it is important that children in their early childhood are surrounded by people who are of the same intended emotional maturity as the child. In early years the children learn how to act around their peers and they also learn a lot of social emotional development which will be useful at their later stage.

According to Erik Erikson, a child with an appropriate and healthy experience will develop trust, autonomy and initiative during early childhood. A child who experience trauma or severe stress will develop mistrust, shame and guilt. A person who does not develop trust in childhood may always have difficulty with interpersonal relationship (Hurlock, 1978).

Children who are deprive of love and affection from caregivers and other elder may not develop ability to bond properly, both socially and emotionally. The early years of life present a unique opportunity to lay the foundation for healthy development and it is a time of great growth. Negative early experiences can impair children's mental health and effect their cognitive and socio-emotional development (Cooper, Masi, & Vick, 2009). Child can feel interest, distress, disgust, happiness, from birth and communicate these through facial expression and body posture. From the beginning of the life (2-6 months) children express their feelings such as anger, sadness, happiness, surprise and fear. All these expressions are the symbol of socialization.

In my study while testing and observing children in Private and Government school going and non school going children performance inside and outside the classroom in the component of Development Assessment Measure II-Socio-emotional development, urban school children from private school scored high. It is because in the private school teachers regularly teach the children in pre-primary classes to greet

properly to the school teachers and other non teaching staff also. Besides this children had to follow the rules and regulation while playing. Compared to semi-urban and urban school in urban private school to please the parents small children had to learn simple English and they were forced to talk in English so children learn basic sentences like-good morning, “May I go to toilet, May I drink water, Excuse me Mam, excuse me Sir etc.”. The children used to ask permission to use object like please give me (pencil, book eraser). In singing rhymes and songs and in dancing also urban children were good because all these things were in the routine of daily schedule in the school and teachers have follow it. In rural and urban school both in private and government school children were friendly talkative and they used to ask questions to me like- *“tapai hamilai padhauna aunu bhaeko ho? Tapaiko ghar kaha ho? Kina hamro nap lieko, pheri pheri pani aunus hai”* (“did you come to teach us? Where is your home? Why you are measuring us (taking height and weight)? Please come again”) though they did not know many rhymes they tried to sing lot of folk song for me, may be to please me. After visiting more than one week they were friendly to me. Once I met children from government school of Jhor village, I met my sample children on the way, while I was going back home after my work at school. They were 3 with their elders they came close to me and ask *“Hamro ghar aunus na”* (please come to our home”). From this type of expression I found that the socio-emotional development in rural children was very positive. They were free, happy, and enjoying the school though it was poor in environmental set up and other things. Children had lot of time to talk with parents, grandparents, and elder of neighbor so they were confident to talk with other people. In the beginning they were not much friendly but after 2- 3 visits they were friendlier compared to urban children. In urban private school small children were conscious about the language may be because of that they hesitate to talk freely. But they were good in following rules and regulation, waiting for the turns while playing and washing hands, repeating rhymes, songs, and dance. So they scored high. Non school going children did not get chances to interact with other people like in school. They were found little bit afraid and they could not communicate according to the test items. I visited school many times to get the all information and interact with school children regularly but to non school going children I could only met twice. Compared to the first day they were friendlier on the

next day. While visiting them I use to give them candy (sweets) to become friendly with them so next day they were little bit open with me. After observing all the 56 non school going children I found that school helps the children to develop in their holistic development even though the school environment were poor, good or excellent. Children learn much social behavior not only from teacher they learn a lot from their peers while playing, talking and performing in the school.

Table 39: Mean scores on Socio- Emotional Development Items

Code of schools	Total No.	Socio Emotional Development (SED) Mean score
PRSC	24	58.000
PSUSC	24	58.000
PUSC	24	60.458
GRSGC	24	58.041
GSUSC	24	56.875
GUSC	24	59.666
NSGC	56	30.930
Total No	200	

Table 40: Scores on *Socio-emotional Development* in different School going and Non-school going Children

Task	Code of children (I)	Code of children (J)	Mean Difference (I-J)	Std. Error	Sig.
Social emotional development	PRSC	PSUSC	0	1.139	1
		PUSC	-2.458	1.139	0.324
		GRSC	-0.042	1.139	1
		GSUSC	1.125	1.139	0.956
		GUSC	-1.667	1.139	0.766
		NSGC	27.071*	0.963	0
	PSUSC	PRSC	0	1.139	1
		PUSC	-2.458	1.139	0.324
		GRSC	-0.042	1.139	1
		GSUSC	1.125	1.139	0.956
		GUSC	-1.667	1.139	0.766

Task	Code of children (I)	Code of children (J)	Mean Difference (I-J)	Std. Error	Sig.
		NSGC	27.071*	0.963	0
	PUSC	PRSC	2.458	1.139	0.324
		PSUSC	2.458	1.139	0.324
		GRSC	2.417	1.139	0.345
		GSUSC	3.583*	1.139	0.031
		GUSC	0.792	1.139	0.993
		NSGC	29.530*	0.963	0
	GRSC	PRSC	0.042	1.139	1
		PSUSC	0.042	1.139	1
		PUSC	-2.417	1.139	0.345
		GSUSC	1.167	1.139	0.948
		GUSC	-1.625	1.139	0.787
		NSGC	27.113*	0.963	0
	GSUSC	PRSC	-1.125	1.139	0.956
		PSUSC	-1.125	1.139	0.956
		PUSC	-3.583*	1.139	0.031
		GRSC	-1.167	1.139	0.948
		GUSC	-2.792	1.139	0.184
		NSGC	25.946*	0.963	0
	GUSC	PRSC	1.667	1.139	0.766
		PSUSC	1.667	1.139	0.766
		PUSC	-0.792	1.139	0.993
		GRSC	1.625	1.139	0.787
		GSUSC	2.792	1.139	0.184
		NSGC	28.738*	0.963	0
	NSGC	PRSC	-27.071*	0.963	0
		PSUSC	-27.071*	0.963	0
		PUSC	-29.530*	0.963	0
		GRSC	-27.113*	0.963	0
		GSUSC	-25.946*	0.963	0
		GUSC	-28.738*	0.963	0

In self help skill area there was significant differences between school going and non school going children. Here also the urban private school children scored

high. Children that goes to school are independent in school they naturally learn many things. In this domain children were asked to open their shoes and clothes. I watched them while playing, eating with friends and talking with them. The non school going children were perfect eating ,drinking but in other thinks like un butting the clothes lacing or tying shoes they were scored less because after going to school for 6-9 months school children were found more perfect in self help compare to non school going children. For non school going children mother were always with them to help so they scored less.

Every child develops at his or her own pace. Many factors, both internal and external, can impact a child's level of emotional development. Role models and environment influence how children react to the world emotionally. Children with caregivers and class teachers who show warmth, compassion, understanding and help towards others will also learn to show empathy and pro-social behavior during later childhood and adulthood. Children with angry and rude caregiver and teacher will struggle more for socialization at home, school and community.

Social and emotional milestone are often harder to pinpoint than sign of physical development. Research shows that social skills and emotional development are very important part of school readiness. This area emphasizes many skills that increase self-awareness and self- regulation. At the age of 4, children become more interested in other children. They like to share their toys and want to develop friendships. Express more awareness of other people's feeling and that is the sign of socialization.

Social and emotional development can begin as early at birth, but these development t end to be limited until the child is no longer a toddler. In the toddler period children begin to develop to interact with others. The parent's emotional state is equally important to child's emotional development. While parents get stressed from time to time, their overall mental states and the way they react to everyday situation can affect how a child develops emotionally.

As children take many life lessons from the home, parent's behavior can be developed in many different ways in their future life. The emotional development of

young children is directly tied to the way the child sees the world around him. Parents must nurture young children providing them self-awareness, confidence, and humility or humbleness to navigate through every stage of child's life. Children react to a situation according to their experience or interpretation which they learn from home, school, and society such as guilt, empathy, shame, pride and embarrassment.

Social development is also influenced by the economic status of a family. For example, children who lived during the great depression were adversely affected if their fathers experienced job loss and economic deprivation. The psychological stress of the father influenced the social development of both boys and girls, and these children were more likely to have problem behavior in pre-school age.

Early childhood is the most critical period for emotional development. Emotional development in early childhood is a step-by-step process that continues to adolescence. According to Erik Erikson, a child with appropriate and healthy experiences will develop trust, autonomy and initiative during this period. A child who experiences trauma or severe stress will develop mistrust, shame and guilt. If children meet their needs in early years they feel safe and develop trust. A child who does not develop trust in early age will have difficulty with interpersonal relationships (Robert, 2005).

A well adjusted child develops trust and security, while one who is badly handled is insecure and mistrustful thus affecting relationships in later life. The quality of emotional attachment or lack of attachment, formed early in life may serve as a model for later relationships.

Every individual is born with a distinct, genetically-based set of psychological tendencies which affect and shape virtually every aspect of the individual's developing personality. Children's emotional health is closely related to the emotional relationship between their parents. Children who have been well nurtured and have formed secure attachments are able to regulate their own emotions and can express empathy, comforting the hurting child, reassuring the frightened child, or getting help if needed. Good peer relations are also necessary for normal socio-emotional development.

Socialization and Play

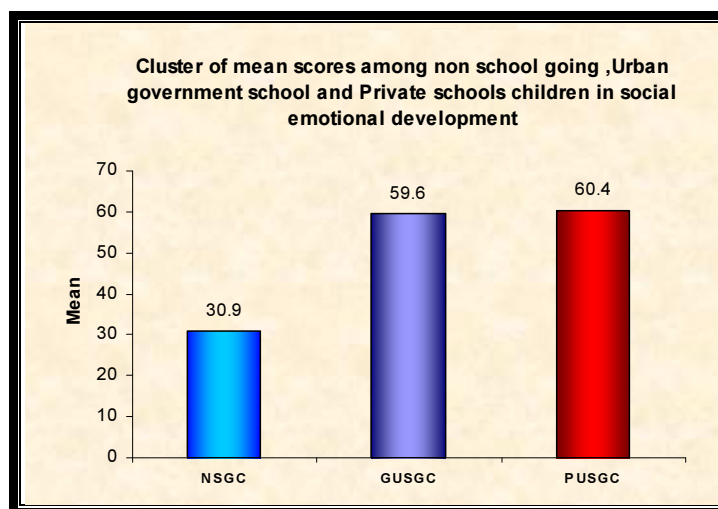
Learning is a key function in life. In our life we have to acquire the skills such as learning hand-eye coordination, understanding the society through dealing with internal and external conflict etc, to become a part of our society.

Play-practice play, symbolic play, social play, constructive play, sensor motor play and Games,

Early childhood is often referred to as the “play years”. This stage of development establishes the foundation for all social behaviors and social interactions. It is literally, the first step in determining, “Who I am?” Play is essential to the young child’s health and also for holistic development. Play increases affiliation with peers, release tension, advances cognitive, social and emotional, and increase exploration. According to Freud and Erikson, play is an essential, useful form of human adjustment, helping the child master anxieties and conflicts. Because tensions are relieved in play, the child can cope with life’s problems. Piaget believes that play advances children’s cognitive development. Play permits children to practice their competencies and acquired skills in a relaxed, pleasurable way. Vygotsky also believes that play is an excellent setting for cognitive development, especially the symbolic and make believe aspects of play, as when a child substitutes a stick for a horse and rides the stick as if it were a horse. Play encourages exploratory behavior by offering children the possibilities of novelty, complexity, uncertainty, surprise, and incongruity (Santrock, 1999). During this period of intense conflict in Nepal children saw a lot of violence and blood shed. Television and media was full of gun carrying people. Often I would see children depict scenes with guns and rifles using handkerchiefs and sticks.

Children learn about our values through daily interaction with elders and explanations of the world through elders (parents, teachers, and others) at home, community, and school and that will be more effective through play. Children learn or absorb social norms, values and beliefs through their exposure to the large world, through friends, extended family, books, TV, and the experiences that have in their community.

Figure 13: Socio Emotional Development



NSGC =Non school going children, GUSC = Government urban school going children, PUSC = Private urban school going children

Developing Self- Help Skills

Social and emotional learning is about learning how to manage feelings, and solve problems. These skills support wellbeing and positive mental health. Social and emotional skills promote children's ability to cope with difficulties and help to prevent mental health problems. Children who have developed social and emotional skills find it easier to manage themselves relate to others, resolve conflict and feel positive about themselves and the world around them. Teaching children social and emotional skills helps to cope and stay healthy in spite of negative things that happen through life.

Research has shown that children's learning influenced by range of social and emotional factors. How well children do at school is affected by things such as: how confident they feel about their ability, able to manage their own behavior, solve problem, understand and accept responsibilities and how well they can concentrate and organize themselves. How positively the children are able to get along with teaching staff and with peers are also the factors that affect and show the socio-emotional ability of the children.

For children to develop social and emotional skills they need guidance that matched to their level of development. To learn social and emotional skills at school, parents and caregivers should encourage children at home to develop these skills. Self-awareness, self management, social awareness, relationship skills (forming positive relationship, working in team or group), and responsible decision-making are essential emotional and social skills for the holistic development of a child.

Table 41: Scores on *Self- Help Skills* in different School going and Non-school going Children

Task	Code of children (I)	Code of children (J)	Mean Difference (I-J)	Std. Error	Sig.
Self help skills	PRSC	PSUSC	0	1.133	1
		PUSC	6.208*	1.133	0
		GRSC	0.208	1.133	1
		GSUSC	-0.208	1.133	1
		GUSC	-1.792	1.133	0.695
		NSGC	39.000*	0.958	0
	PSUSC	PRSC	0	1.133	1
		PUSC	6.208*	1.133	0
		GRSC	0.208	1.133	1
		GSUSC	-0.208	1.133	1
		GUSC	-1.792	1.133	0.695
		NSGC	39.000*	0.958	0
	PUSC	PRSC	-6.208*	1.133	0
		PSUSC	-6.208*	1.133	0
		GRSC	-6.000*	1.133	0
		GSUSC	-6.417*	1.133	0
		GUSC	-8.000*	1.133	0
		NSGC	32.792*	0.958	0
	GRSC	PRSC	-0.208	1.133	1
		PSUSC	-0.208	1.133	1
		PUSC	6.000*	1.133	0
		GSUSC	-0.417	1.133	1

Task	Code of children (I)	Code of children (J)	Mean Difference (I-J)	Std. Error	Sig.
		GUSC	-2	1.133	0.573
		NSGC	38.792*	0.958	0
	GSUSC	PRSC	0.208	1.133	1
		PSUSC	0.208	1.133	1
		PUSC	6.417*	1.133	0
		GRSC	0.417	1.133	1
		GUSC	-1.583	1.133	0.803
		NSGC	39.208*	0.958	0
	GUSC	PRSC	1.792	1.133	0.695
		PSUSC	1.792	1.133	0.695
		PUSC	8.000*	1.133	0
		GRSC	2	1.133	0.573
		GSUSC	1.583	1.133	0.803
		NSGC	40.792*	0.958	0
	NSGC	PRSC	-39.000*	0.958	0
		PSUSC	-39.000*	0.958	0
		PUSC	-32.792*	0.958	0
		GRSC	-38.792*	0.958	0
		GSUSC	-39.208*	0.958	0
		GUSC	-40.792*	0.958	0

In self help skills, children from government urban schools scored high because in private schools, teachers and caretakers help small children in different activities such as taking off shoes, putting books inside the school bag and parents of private school children were also protective, they do not allow children to do simple work at home. In rural and semi-urban government schools, teachers were not as aware of children's activities; they cared less about neatness and cleanliness and children were also careless. Most of the children in urban government schools are from low income families they are competent in doing household chores, so children

were more confident and did their work by themselves. They can take care of their things-books, bag etc.

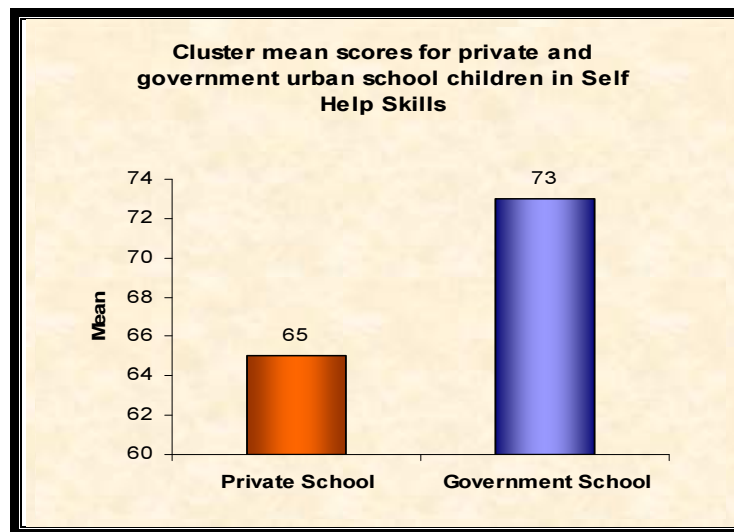
Self-esteem

Self -esteem is how one feels about oneself; how much a person likes accepts and respects him or herself overall as a person. Healthy self-esteem is a child's armor against the challenges of the world. (Hicks, 2007)The overall happiness and success of children primarily depends on parents building self confidence in their children as having high self-esteem will have tremendous impact on a child's success and independence as adult. For these entire child must have proper self skills and emotional balance from the beginning of their life. Children with high self-esteem will be able to act independently, assume responsibility, accept new challenges, take pride in their abilities, able to deal with their emotions, and handle problems efficiently. For the children to have healthy self- esteem they must feel that they are loved unconditionally by their parents, teachers and other adults with encouragement and praise. Children with low self-esteem feel unloved and unwanted.

Children who do not develop an independent sense of self may develop low self esteem and a lack of self confidence. Government school children performed better in self help skills

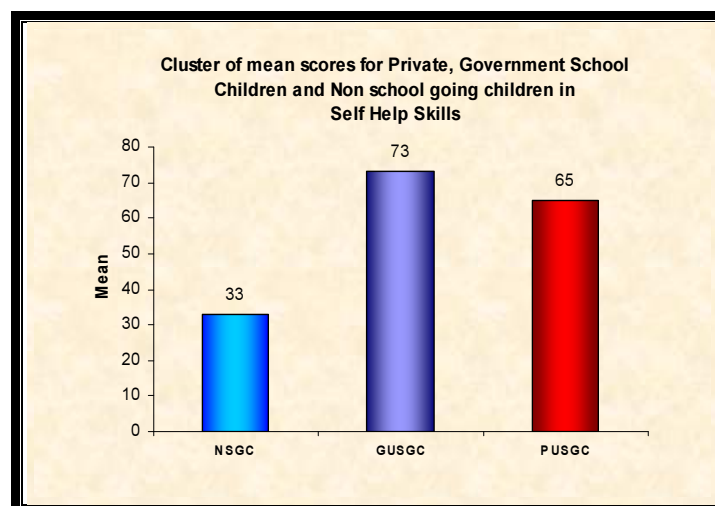
In this study I observed the children performing different self help skills inside and outside classroom individually from different schools. One rural government school and one urban government school scored high 75.50 and private school's highest score was 71.25. The urban private schools which scored highest in all domains and scored lowest in self help skills 52.62.

Figure 14: Mean scores of Private and Government school going children in Self Help Skills



There is significant difference in self help skills level of Private and Government urban school children's mean scores. The government school children were found to be more independent in self help tasks.

Figure 15: Mean scores of Private, Government and Non school going children in Self help skills



There was significant difference in between urban private and government school children and non school going children.mmm

Table 42: Percentages of Private, Government and Non school going children in Self help skills

Types of schools	Total No	Average score(%) in self Help skills
PRSC	24	71.250
PSUSC	24	71.250
PUSC	24	65.041
GRSGC	24	71.041
GSUSC	24	71.458
GUSC	24	73.041
NSGC	56	32.250

There was significant difference between private urban school and government urban school, and non school going children in self help skills. In most of the urban private schools children were from economically sound family so they were willingly paying high fees to the school and their expectation also high from the school. A child from a rich family had many facilities and they were dependent on the elders (mother or caretaker or maid) so compare to a child from rural areas they were not confident in self skills like, eating, drinking, dressing and undressing clothes, lacing shoes, wiping nose wiping and blowing nose, caring for self at toilet, washing hands, using correct utensils for food avoiding common dangers etc. Children from rural areas were not much dependent on the teachers and parents in all these self skills especially when they started to go to school as well. While testing and observing the individual child from a rural school children scored high in Self Help skills. In Self Help skills non school going children's mean score was only 32.25. This was a bit disconcerting as I had thought that the children would do similar to rural school children and score higher than urban private school children. But this was not so. This was because most of the non-school going children were children whose mothers were domestic helpers and took the children to their work place. Mothers use to help

the children with all their personal work at home, so that they could get back to doing the domestic work they were involved with. This gave children less exposure to self help skills as well.

Case study of Pratima a non-school going girl

Pratima's father was working in a poultry farm since 6-7 years and mother went to the village most of the time in a year, so she did not have a permanent job. While Pratima's mother was in Kathmandu she worked as a helper in different areas like gardening, washing clothes, cleaning house etc. Due to her constant visits to the village where her husband's family lived, Pratima (4 years old) had not joined any pre-school. Pratima's mother told me that in school they did not teach to read and write, sending the child to school for just play was a waste of money. Pratima could communicate a lot because of her mother's work in different types of families. While spending lot of time with Pratima, I found that she could recognize 5, 10 and 100 Rupees notes. She knew that from 100 rupees she could buy many things (biscuit, cheese ball, sweets) and from 5 and 10 rupees she could only buy one thing. She knew only 4 colors -red, black, white and yellow (in Nepali- rato, kalo, seto, and pahelo). When I asked her, "Pahelo bhaneko ke ho? Pahelo rang kasto huncha malai thaha chaina" ("what is yellow? I don't know how yellow color looks like"). She replied, "bhesar jastai huncha" (It is just like turmeric). Tapailai Bhesar thaha chaina? Tapai pakaunu hunna mero amale ta Dal, Tarkari pakauda sadhai bhesar halnu huncha ni." (You don't know bhesar? You don't cook? My mother use bhesar every day in dal and curry".)

She could count up to 10 but when asked to give five small stones in the hand of researcher she just smiled and giving one by one she gave me a lot more than 10 stones. I had used the Development Assessment Measure (tool) to assess the overall development of Pratima and observed deeply. Though she was good in Auditory memory, her verbal problem solving, pattern making and visual discrimination, was poor. Her physical motor development was good. She was social and compared to school going 4 year old child, her performance was not poor. She loved to help her mother at work. According to her mother sometimes she was too talkative and disturbed her at work. During the day time, Pratima's mother had to finish her work while Pratima was taking a nap.

3.3.3 Teacher Rating Scale (TRS)

Teacher Rating Scale (TRS) had to be filled by the class teacher. The child's behaviour and performance have to be judge by the class teacher but the teachers from government school could not filled it correctly, as they were not well aware about each child's capability and were less discerning of individual differences between children. In TRS component teacher had to evaluate the child according to their performance in classroom such as listening carefully and do all the home work and class work etc. But most of the government school teacher and rural private school teacher did not filled the TRS questionnaire properly. They filled it haphazardly so I could not correlate it with other development assessment measure.

3.4 Perspectives of principals, parents and teacher's perception

3.4.1 Interviews of Principal

In a school the Principal is accountable for overall leadership, management and development of the school within the guidelines of the Ministry of Education of Department of Education. In the process of research work the first contact person was the Principal of each school. (Appendix I Principal's profile).

In private schools, out of nine, six (66.6%) were male principals and three (33.3%) were female principals. In government school, out of nine, seven (77.7%) were male principals and two (22.2%) female principals. In government schools out of 9, six were (66.6%) were graduates and three (33.3%) were post graduates. In government schools the minimum qualification required for a secondary school teacher is graduation. The youngest principal was 28 years and oldest was 58 years old. Among 18 principals, 17 (94.4%) were married and only one (5.5%) female principal from a private school was single. Most of the government school principals had at least 13 years of teaching experience. In private schools a person can directly be a principal as a founder principal or appointed without experience. Among 18 sample schools, 3 principals from government school had more than 30 years of teaching experiences and in private school only one principal had 20 years experience as a teacher because she was the founder of the school. To be a principal in a primary

school one should be at least a graduate. The retirement age for the principal and teacher is 63 years.

Most of the principals were living near the school and came to school walking. Only 3 (male) principals' residence was more than 6 km from school and their mode of transport was motorcycle. Two principal (female) used to come to school by local bus and their residence was 4 km away from school. For all principals it took about five to forty minutes to reach school.

When I asked the principals about their job satisfaction, principals from government school said they were satisfied with salary and retirement facilities. Among 9 principals, three said that according to them they wanted to run school in a well managed system but because of political and other obstacles they were not completely satisfied with the job. In 4 private schools principals were not satisfied with their salary. And in other 5 schools principals were founders and partners of the school management so they were found satisfied with their work. Earning enough money from school and number of students was also satisfactory for them.

In Nepal if a person does not get a Government job or job in the private sector an educated and qualified person joins a school. So they are not really serious about the teaching profession especially in private schools. In government schools compared to the average private schools, principals and teachers salaries are good and there are other facilities after retirement. Therefore most of the teachers in Government schools were appointed through "political force" or other "source-force". Because of all these reasons education sector of Nepal is not developing according to social and national needs.

A rural private school Principal's experience with the Tiffin programme

Talking about the ECD programme with a Principal of a rural private school, I obtained a lot of knowledge about parents concepts and attitude about ECD and education for their children. In this school the principal was very aware of the importance of children's holistic development. He said that "for the all over development of a child, nutrition and good health is also a basic component". The founder of the school was a lady who had Early Childhood development training and

was in favour of ECD programme for young children. So the school management decided to start a day meal programme in the school.

Most of the schools in Kathmandu start at 10: 00 AM in the morning. So the school going children have to be ready for school at 9:00 am. Sometimes working parents dropped their children at school earlier around 9 0' clock in the morning because they have to reach their office at 10:00 am. In the morning because of parent's busy schedule children do not eat their morning meal properly. In rural areas also mothers were very busy with their household work such as preparing food for the family members and care of cattle, etc so children don't eat properly before going to school. Children's physical and mental growth depends on the amount and kind of food they eat. Quantity, quality and feeding time affects a child's health greatly. So the Principal was very much in favour of day meal programme in the school especially for small children. Children need not only enough food but also enough rest.

The school was established in 1987. In the beginning the school management demanded parents to send Tiffin for their children of all grades but very few parents managed to send Tiffin. Mothers found it very difficult job to prepare Tiffin for their children in the morning. In the village most families had only two meals (in the morning at 9-10 and in the evening at 7-8PM) and those who worked in the agriculture field had snacks around 1:00 o'clock. Children had snacks after coming back from school. Khaja (snacks) usually means having roasted maize and soybean, beaten rice, homemade bread (Makai, Bhatamas, chyura, roti) with some pickle or yogurt or curry but now a day's foods such as instant noodles, different kinds of potato chips, biscuits, cookies ,coke, etc are replacing the traditional Khaja (Snacks). These readymade foods are more expensive compared to homemade food but children of all age liked these types of foods. So for parents from rural areas it was hard to manage. Children with empty stomach couldn't read and write or do any types of activities properly in the school, according to the Principal of the school. Very few parents sent Tiffin for their children but most children did not like to spend time eating it because the children without Tiffin use to played longer than those with Tiffin. For the teacher and school management it was very difficult to manage the

Tiffin problem. Sometimes physically strong children ate their friend's Tiffin without permission. Many times the Principal organized meetings with parents and tried to convince them about the importance of food and made Tiffin compulsory. To send Tiffin was a great burden for mothers. The principal organized a meeting with fathers. They shared their ideas about Tiffin programme. Some father told that Tiffin was compulsory in the many Private schools of urban areas but expensive. If it was given at a subsidized rate they were willing to pay money for the Tiffin.

It was not an easy job to start the Tiffin programme. School needed a kitchen, dining hall, cooking equipment and eating utensils. So after many meetings and discussions, two years later the Principal and school management decided to start the Tiffin programme at school. The principal and the management committee members managed money for kitchen and dining hall setting.

The school charged only Rs.50 per month per child for Tiffin which was very simple and cheap. They gave chyura (Beaten rice) with Chana tarkari (horse gram curry) or yogurt (mixing water and sugar) for the Tiffin programme. There was no profit for the school and children were happy to have Tiffin with friends without discrimination. After two months parents came and expressed their problem about the Tiffin. Parents who had 3 children in the school found the Tiffin programme expensive. School management also gave free education to a child in which a family had 3 children in the school but for Tiffin they had to pay for all 3 children. In 1989 the tuition fee was Rs.100 in the school. Parents who had 3 children in the school had to pay only Rs.350 including Tiffin charges. The Tiffin charges were Rs.150 (Rs 50 for each child). For rural people it was expensive. So again the school management decided that parents who felt burden for Tiffin charge they can pay daily Rs. 2 per child. It was an easy way to pay for the Tiffin for parents who earned daily. The Principal had not started the Tiffin programme for making profit.

For the small children it was a long gap for eating food. They ran, jumped, shouted, played, sang and danced in the school which needed enough energy. One day a father came to school and spoke to the Principal about the Tiffin programme. He vehemently refused to pay Rs.150 for his three children. The Principal tried to

convince but could not. Actually he (the father) was a chain smoker he finished minimum a packet of cigarette in a day which cost about Rs.25 to 30 at that time but he was not willing to pay only Rs 6 for the three children's Tiffin per day. A father who drank alcohol spent Rs. 25 to 60 per day but refused to pay the subsidized Tiffin fee in the school. The principal tried to convince them in a parent-teacher meeting but the parents ignored it. Some of fathers told that they had their account opened in a local shop where they could pay for provisions at their convenience but in school they had to pay on a monthly basis and it was difficult for them. In the end the Tiffin programme was closed even though the small children enjoyed it a lot. The Principal regretted the fact that it was closed. He said that, " School children were fresh and healthy at that time because they had full stomach". Mothers were also happy and satisfied but it did not suit many fathers.

Principals Views

Principal from one private urban school reported that sometimes a teacher with one week training was more active and enjoyed teaching according to the ECD training than a teacher trained for six months training. She told that it really depends on the person. Those " who like/ love children they were always good teachers and who just come for job or are only interested in monthly salary they do not enjoy teaching and do not care for children properly". They always complain about the school management. The Principal shared her experiences that once she appointed a girl after her School Leaving exam (S.L.C.). The teacher was given only little instruction to handle the children, then after 2- 3 weeks she was perfect at handling small children in pre-primary classes. She uses to keep the children busy all the time and enjoying with song, dance and story, craft work etc. All children loved her. According to the Principal during her 20 years experiences in the teaching profession it is important that a teacher should be involved in her work and should like being with children. They should not join this profession only for money. She again said though educational qualification was necessary the person's job must be according to their choice or interest. Sometimes money also affects the profession. Because of low salaries in the school, the qualified and good teachers left her school and choose other

professions where they got a handsome salary. She added, “may be other school managements are also facing the same types of problems.”

She explained that in her school 20 years ago school the fees was Rs.100 and the salary of the teacher was minimum Rs1000. In her school the fee is now Rs.1000 and teacher’s minimum salary is Rs 4500. She has a few senior teachers who received only Rs.1000 fifteen years ago and now they are drawing Rs.7000. per month. Compared to a new teacher their salary is high. They have also received many trainings but their performance is not satisfying. So sometime money also does not work, it is more about feeling and interest. Those who enjoy the work more they perform better. She said that “ *kar le hoina rahar le kam garnu parcha ani matra kam bata santusthi paincha.*”(One should work willingly not by force, if you work willingly then you will get job satisfaction)”she was very much in favor of ECD programmes for younger children.

Only in two private schools there were regular parent- teacher meetings held. Two government schools and seven private schools had parent teacher meeting after the result of the term examinations. In other 7 government schools also they have parent- teacher meetings occasionally. If they have some problem with the children they called the related parent for discussions on the child’s problem.

The main problem of School Management in private sector was to find a permanent teacher. Every year they had to search for trained teachers. It may be because of lower salaries compared to government schools. In government schools the problem was that trained teacher did not follow the teaching methods according to ECD training they received.

In most of government schools teachers were appointed politically or by the recommendation of superior persons in the country. Sometimes teachers were more powerful than the Principals in the government school. According to Principals in almost all school there were pre-primary teachers according to number of children. Only in two schools there was more than one ECD trained teacher. In one private primary school there were 4 trained teacher and among them one teacher and the Principal had training from *Rato Bangle* (six months Montessori Diploma). In this

school only all trained teacher were perfectly applying their training skills with children.

According to a Principal's report in almost all Government schools teachers were graduated from Education faculty. After graduating from education (I.Ed, B.Ed) most of the graduates work in the schools. Only in two government school the pre-primary teacher had received ECD training from Department of Education. In all sample private schools pre-primary teachers were trained privately from the NGOs and ECD training centers. Duration was one week to 6 months.

Interview with Principal

According to the Principal, Sangita joined a literacy class. She could read and write and pronounce alphabets correctly. When teachers were late for a class, Sangita sang for the children and sometimes using a story book she told stories to the children. She helped children in indoor and outdoor play. She showed flowers to children in the school garden. Children enjoyed a lot being with her. Once children asked her to teach alphabets. Children said, "Sangita didi kelna, geet gauna pugyo, aba padne." (Sangita didi Now it is enough singing and playing, let's read and write). Then she had to teach them alphabets and numbers. Once the Principal heard her teaching English alphabets. She was saying "A fall Apple, B fall Ball" and children were repeating same pronunciation. For her and children there was no difference in fall and for. After this event the Principal asked her to join literacy classes nearby in her free time after the school work (after 5: PM). She knew each and every child's name, class and also recognized their parents. She talked about the child's positive and negative behaviour, participation and performance in the school with children's parents who came to drop off and pick up their child. She was always friendly with all in the school staff. The Principal told me that the educational qualifications did not work in child rearing and caring. Only motherly feeling and friendly nature was enough to take care of young children in a school. The Principal said, "Now Sangita is a perfect ECD teacher though she is only Ayaa."

While describing the school philosophy, the Principal (female age -56years) of one school (code -08) established in 1991, talked about Sangita a young women who

joined the school. Sangita was appointed as a residential peon in the school 6 years ago. She came with her family (husband and two daughters, age 2 and 5 years) to Kathmandu.. Her husband was a driver. They came from Dang district (far west), severely conflict affected area. Their family told them to shift to Kathmandu and search for their survival. At that period the arm conflict had begun in the name of the Jana Andolan by the Communist Party of Nepal (CPN) Maoist. They demanded Jana or Dhana (person or cash) from each family in the rural area to support their civil war against the State.

When she was appointed, she cleaned the school compound and classrooms. After a few months she started to help in the school kitchen. In that school, day meal or Tiffin was provided to all children at a subsidized cost. She was very friendly and loving to the children. Within one year she learned the techniques of handling the school children. So the Principal requested her to receive children (Nursery, LKG, and UKG) from parents in the morning and see them off after school. She was so perfect in her duty and all parents appreciated her work and children were also much attached to her.

In 2005 there were more than 35 children in the Nursery class. This was because people from rural areas were migrating in large numbers due to Maoist insurgency. There was no provision of sections in the school so the Principal appointed one more female peon and Sangita's duty was to stay with children (Ayaa didi) in the Nursery class. With her experience she was able to understand the needs of children. In the beginning small children hesitated to talk to and ask the teacher to go to toilet and drink water. The teachers were always busy with their duty of teaching. In order to go to toilet, small children had to ask in English, "May I go to toilet/May I drink water". These English words were unfamiliar to the children and difficult for them to pronounce due to this reason sometimes shy children wet their underwear. When their friends noticed this the children felt inferior and sometimes they cried due to fear. According to the Principal, Sangita understood the feelings of children because she had two daughters in the pre-school classes. She was also an amazing learner.

In this school the teacher and staffs members had the facility of free tuition for their children. Other peons and teachers were not friendly with the school children though their children were also studying in the same school. They concentrated only on their own children so the Principal made arrangements for not sending child's parents in the class where their child was studying. Only Sangita was allowed because she did not discriminate. Her own daughter called her Didi in the class room. Once her daughter was crying in the classroom because her mother, Sangita, was holding a boy (new comer) in her lap for the whole day.

Sangita was illiterate when she was appointed. After she was appointed as an Ayaa didi she was able to read English, Nepali alphabets and could recognize the numbers up to 10 both in English and Nepali. Two years ago, the Principal had arranged for a 5 days ECD course for all teachers and staffs. After the 5 days training the Principal found a lot of changes in her activities. She talked about holistic development of children with the teachers and friends. I also got a chance to talk to her. Sangita said, "After attending the ECD course I understand the value of child rearing. Sometimes I feel guilty about my elder daughter because when I was in a bad mood I use to slap her and scold her bitterly. May be because of that my elder daughter is not that intelligent (chalahk) compared to younger daughter. Now I am very much aware of holistic development of my daughters but my elder daughter is already 9 years old. I think I have already damaged her "maile dherai kutekai karan le mero thulo chori sano chori jasto chalak huna sakena jasto lagcha" (may be because of my punishment-beating and scolding, my elder daughter is not intelligent compare to younger daughter). I was surprised with her expression. Even an educated mother could not understand and explain all these things so easily.

The case study reflected the overall beliefs most people have relating to the qualities of a preschool teacher. A motherly temperament was rated as higher up rather than teacher training by most persons involved in ECCE.

3.4.2 Interviews of Teachers

Teachers are the main pillars of the school management. They play a significant role in assisting the school to improve children's performance and

educational outcomes determined by the school strategic plan. Good teachers are expected to have knowledge and pedagogical practice to meet the diverse need of young children. To get the teacher's understanding level of ECD, I interviewed 18 pre-primary teachers from rural, semi-urban and urban areas. (Appendix 11 Profile of pre-primary Teachers)

Among 18 teachers all (100%) were female, 13 (72.2%) were married and 5 (27.7%) were unmarried. Fourteen (77.7%) were in the age range 20-30 and 4 were above 30 years. Among the 18 teachers 12 (66.6%) had passed intermediate level and only 6 (33.3%) were graduates. Among the 6 graduate teachers 4 were from private schools. Among 18 teachers 11 (61.1%) had one to 5 years teaching experience and 7 (38.8%) had 6 to 10 years teaching experiences. There were more government school teachers who had at least 5 years teaching experience. Five teachers were from government schools and two from private schools. This may be because of provision of salary and facilities for the teacher in the government school.

Most of the private school in my sample had the problems of hunting for a new teacher every year. A huge turnover of teacher was a big problem in most private schools. Teachers from private schools reported that the salary was low for them in comparison to government schools. Government school teachers complained about the low quality and not enough teaching learning materials in the school. They also said though they had training of ECD they were not able to apply it because of poor classroom arrangement and lack of teaching learning materials. Pre-primary classes were not arranged according ECD curriculum and needs.

In my sample of 9 schools only one government school (code 018) had enough teaching learning materials. Two female teachers were trained from an Early Childhood Development training programme from District Office Education (DOE) and also got the support to establish ECD class room from Department of Education Sanothimi. Since I was familiar with the children in this school and because I had visited it many times, one day I went directly to the *Shishu Kakcha* (Nursery class). There the teacher was gossiping with another teacher of Grade I in front of class room door. The children were sitting on the carpet in a circle and the Nepali Alphabetical

blocks of *Kha* to *Gyan* were arranged in an order and pre-primary children were repeating the alphabets turn by turn and also clapping when they pronounced the alphabet. That teaching process was not according to the ECD training that she had received. Before ECD training teachers used the chart in the class room wall to teach alphabet (*Kha*, *Kha*, *Gha* and A,B,C,D ,1,2,3,4) and after training she was using the blocks in the same manner. The teacher knows that guiding the small children according to ECD programme was time consuming and a teacher must be active all the time. To fulfill the demands of parents teachers use to give some homework and teach few rhymes in English.

In government schools teacher's basic salary was good compared to private schools. In renowned and expensive private schools tuition fees and other fees for extra activities were expensive and teacher's salary also sometimes more than Government schools. In those private schools where number of student were few and fees were also less, they could not pay much for the teachers so after two or three years experience the teachers hunted for other jobs or those who liked teaching profession they went to the other private schools where they got more money. Most of the private schools in my sample had the same problems. Teachers from private schools reported that the salary was low for them compared to government schools. Government school teachers complained about the low quality and not enough teaching learning materials in the school.

Picture 1. Photo 4

Compared to government school teachers (pre-primary) private schoolteachers were found more active, attentive and regular in the school. They taught many rhymes in English and Nepali, dancing, drawing and some paper craft also. In private schools parents' demand is more for home work compared to government schools. If the children learn simple conversation in English and sing few English rhymes parents will be very happy and satisfied with school and this will increase the number of children in school. For the private schools the main source of income is only the fees. So to hold on to children they have to give lot of home work for the children. These include just writing many pages of alphabets and arithmetic, most children do not

recognize the alphabet and numbers. Children can count up to 10 easily but they do not exactly understand the concept of each number.

All the schools were not so far from the teacher's residence. Those teachers whose house was more than 5 kilometers used the local bus to reach school and they are only 5 (27.7%). Among 18 teachers 5 from private school and 2 from government school total 7 (38.8%) were not satisfied with their job.

All teachers said that they knew about ECD curriculum and they were trained from different institutes (duration was 5 days to 10 months). Fifty percent teachers had training of 10 months from District Education Office of Nepal Government and 38.88% had done Education Campus course from Tribhuvan University. Though they were trained from different institutions their teaching methods in the preschools were traditional. Only two urban private schools were using the teaching methods according to training. According to the teachers children were happy but parents had a lot of complaints about teaching learning process. Parents use to say that even "after 3 months of sending the child to this school their child didn't know reading and writing. Comparing their own children with the neighbor's children who were going to a school in which they were paying little fees, they were dissatisfied." When you are charging more fees you must teach the child properly, only playing and singing, dancing is not enough", is what parents expressed.

A teacher experience with a Grandmother in an ECD program in an urban school

Sarmila, a class teacher of nursery from a private school (code 08) explained that one grandmother of a child came to her and asked her for permission to see the nursery class room where her grandchild use to read, write and play. In that school before starting classes, parents could visit the room with the permission of principal/administration. So the teacher guided the grandmother to the nursery class. The grandmother was very happy to see the room because she was from the rural area and due to conflict in the country their family had migrated to Kathmandu. Her grandchild (boy) always praised his school, teachers and classroom and play materials. For him everything was new and good. According to the teacher the grandmother touched the cushion and said, "Mero Nati Yehi Chakati Ma Basera

Padcha? Kati Naram, Kati Ramro!!! , Kelna Ko Lagi Kati Dherai Kelaunaharu?”
“(Is this the cushion where my grandchild sits and studies? It is so soft and nice and there are lots of toys to play!!!) Teacher was surprised to hear all these expressions because many other urban parents had complained about the classroom arrangement and other things about the school. The school environment was the same but education level, economic status and social environment of parents and children affect their vision.

In the process of interviews with teacher, one teacher from a private semi-urban school said that sometimes mothers use to come to school and complain to the principal that “your teachers are not strict in disciplining, they never punish the child. So they neglect doing their home work and they become very naughty at home. They don’t listen to parents.” *Dui char thapad nalagae ketaketi kasari anusashit hunchan?* “(How can a child be disciplined without few slaps).

Samir and Puja

With the help of a class teacher and Principal (school code -07) I was able to meet and interview Samir and Puja’s mother. Samir was from a low income family whose mother worked as a domestic helper (washing clothes and cleaning utensils) for different families and the father was a carpenter. Father was just literate (could read and write only) but mother was illiterate. Their original home was outside the Kathmandu valley. They got married at the age of 15 years and 17 years without parent’s permission so they came to Kathmandu and started to work at whatever they got. Husband was not a skilled carpenter but he was hard working so he managed to survive in Kathmandu city. Samir’s mother worked for different families (middle and high class) so she got a chance to interact with different family members. Because of inflation it was difficult to survive in the urban areas so both of them decided to have only one child and educate him properly. Samir’s mother told me that they were influenced by city life and so were Puja’s parents. Puja’s parents were also from the same village and were educated. Puja’s father was a teacher in a primary school and mother was SLC pass (passed Grade 10). In the village their status was lower than Samir’s parents. Puja’s parents also decided to have only one child even though she

was a girl. Puja went school one year earlier than Samir though their age was same. Puja was 15 days older than Samir. Puja was sent to pre-primary school (code-07) at the age of 2 years 4 months. She was admitted to the play group but after 3 months her parents were forced to teach her the 3RS. In school she was forced to read and write.

In conversation with me, Samir's mother said that sometimes she visited Puja's family. Once Puja's mother said, "My daughter can read, write and speak English. What about your son? Is he still at home? You haven't sent him to school? I think he is little bit slow compared to my Puja". After that conversation Samir's mother felt very bad and she was very upset. Next day she spoke to one of her employer's and fortunately that lady was ready to sponsor her son. That lady was a school teacher and counselled her that her son was normal. She suggested that it would be better if he joined school after completing 3 years.

When Samir completed his 3 years, his mother admitted him to the same school where Puja was going. Compared to Puja, Samir was already one year late for the school. After three months the first term exams were held in the school and Samir's mother asked the school management to allow her son to attend the exam of the nursery class. Actually he was admitted in the play group but she argued that Puja was only 15 days older than Samir so he could also compete. Class teacher and Principal convinced her that her son is doing very well in every areas of development. He was trying to learn every activity. He was gentle and friendly. The Principal also noticed that Samir's mother was comparing her son with Puja. So she again convinced that children learned many things by playing and many other activities in the school. Finally she agreed with the Principal and her son was in the play group for one year. The whole year she found her son always happy to go to school and very talkative. He sang the national anthem in an interesting way, araswoti prayer, lots of songs and rhymes. His parents were quite happy with their son's performance.

After one year he was in Nursery class, quite happy to learn to read and write. I found this boy a very normal child. According to his mother and while comparing with Puja he was friendly, charming but not so good in studies. He

finished his homework very fast and went to play with friends in the neighbourhood. Mother was illiterate so she could not check his homework. His learning was only dependent on school. But in the case of Puja she was in LKG. Her parents scolded her while doing homework. She had to erase her writing many times to make it smooth and nice. According to the class teacher, Puja was good in studies, her handwriting was good, she knew spellings of birds, and animals etc. but she was not so happy in the class. Compared to her classmates she was younger in age but bigger in size. After school she had to read and write according to her mother. Mother had made separate exercise book to write at home. Her parents wanted her to come first in the class. Due to all these reasons Puja looked serious and stressful all the time.

Principal suggested to her parents not to give much stress to her for the homework and study. According to her age she was doing her best but parents said, “No! She is becoming careless and stubborn. We have to correct and guide her for good habits”. Her father was a strict science teacher in a private school. Both parents did not agree with the ECD philosophy. According to the Principal, it was easy to convince illiterate parents compared to educated ones. The example was Samir and Puja’s parents. I found this case very interesting so after three years I again went to that school and spoke to the class teacher and principal. Puja and Samir both had not changed the school. Puja was in grade one and Samir was in UKG. Samir had improved his handwriting and among 28 children he stood 10th in the class. His mother told the Principal that he wanted to come 1st or second in the class so wanted to join tuition classes (there was provision of extra class for one hour in the school). Parents had to pay extra Rs.200 per month for that class. After joining that tuition class he had improved a lot. He was always very eager to learn. Principal again explained her view that due to less stress in early age Samir was different. He had no stress for study because his parents were always satisfied with his performance. According to his mother he was very good in every field. He kept his belongings properly. He was helpful, understanding (sometimes when he demanded for new clothes and shoes, his mother asked him to wait for few days or a month and he agreed for that because he knew his parent’s economic status).

Samir's parents were satisfied with the school and school environment. They said "Our child is more intelligent than us because of the school. If we were in our village he would not have become like this. We want to provide him better education".

According to the Principal, Puja was also doing well but compared to Samir not keen to learn. When she was in play group she was different and friendly. When she was upgraded to LKG she also missed her good friends from the play group. She was good in studies but her holistic development (cognitive, social, emotional, language) was not satisfactory according to the Principal.

3.4.3 Interviews of Parents

Parents play the most important role in providing the nurturing and stimulation that children require. But they need information and support to develop good parenting skills. In the past extended family members were there for good advice and role model for inexperienced young parents. Now, often a young inexperienced family lives far away from grandparents so parents are isolated and their role is much more important for the child's holistic development. Often young parents do not know many little things they can do to foster their children's healthy cognitive and emotional development. Parents are the first teachers of their children and creating awareness for fostering optimal development in their children is important (Appendix: I2 Parent's profile).

The study had thirty six mothers of school going children and four mothers of non-school going children. Two mothers were selected from each school for with the help of school management staff and primary school teacher. Mothers who use to drop and pick up their child from the school were selected. To identify a mother for interview the pre-primary school teacher helped to convince the mother to talk with me. Most of the mothers (10) from private school were between 26-30 years (55%), similarly fathers were 2 (5%) in the age group of 20-25, 20 (50%) were 26-30 years, 16 (40%) 31-35 years and 2 (%) were 36-45 years old. Only one (5.5%) mother's age was 40 and she was a post graduate. She had three children two son and one daughter. Most of the mothers were house wives and education level was also very low. Among 40 mothers 4 (22.2%) were illiterate, 5 (27.7%) had passed primary level and another

5 mother had finished their secondary school. Because of low education level they were not very aware of early childhood development programs and its importance. Among 9 mothers (age group 20-25), only one mother from rural area had child at the age of 17 yrs. and another 2 mother from rural area had first child at the age of 19 yrs. Though Kathmandu is the capital of Nepal and a developed region, its rural areas (15 to 30 km. far from center of the Kathmandu) resembles the other part of rural Nepal. Because of awareness programmes conducted by different INGO/NGOs and media, people from my study areas were aware of age of marriage and family planning compared to other rural and remote area of Nepal. But in other things like life style, structure of houses, school environment, health centers were very much similar to other rural area of Nepal. Among 40 families only 16 (40%) were living in the joint family. Among 40 mothers, 2 (5%) had one child, 27(67.5 %) had two children, 9 (22.5%) had three children and only 2 (5%) had four children. Only 4 mothers were graduate, 9 illiterate and 11 were able to read and write only though they tell me that they had passed primary level and they had forgotten many things they had learned during their childhood. Compared to father's education level mothers were found less educated. Most of the mothers, 50% were house wives , 10 % were teachers. Thirty percent fathers were working as foreign labor and 12% were working in the government offices.

When the researcher asked about playing and playing hours given to the children to the 40 mothers 27 (65.5%) mothers said that children can learn from playing and 45% mothers arrange about one hour play time for their children. Most of mothers 37.5% reported that they don't buy expensive toys for their child. Only 52.5 % family members use to read and tell stories to the child at home. Most of the rhymes were taught at school. When researcher asked "Does your child enjoys going to school?" only 15 (37.5 %) mothers said "yes" and.70 % mothers reported that there is not enough playing area and playing materials in the school where their children are studying. Eighteen (45 %) mothers said that there is not enough play areas for the child at home to play. Among 40 mothers 30 (75%) mother reported that school does not allow enough time for playing and 45% mother said there is lots of home work every day and they were happy about this. Because of recent awareness programmes

of ECD , 70% mothers said that they know about Early Childhood Development and 50% mother said that ECD is about holistic development of the child and 12 (30%) said that ECD means being good in studies.

An equal number of mothers 40% felt that the school was expensive/ not expensive. Most mothers said that they were sending their child to a private school because of English being the medium. They found the teachers and care-givers friendly, caring and polite in comparison to government schools.

Government school mothers from urban areas were not much educated and most of them were household helper/ maids. Though their economic level and education level was low, they were aware of children's holistic development. It may be because of urban dwelling and facilities of T.V. radio and contact with educated persons. Compared to mother's education level father's education level was higher. According to mothers, fathers were not much aware of the children's holistic development. They only give money for their children's school fees. While interviewing mothers from rural and semi-urban areas, I found them expressing their feelings explicitly towards renowned private schools. They also wanted to send their child to those schools. They dreamed of their children with the school uniforms and looking nice. They imagined the water-bottle, tiffin box and a nice school-bag on back. The school bus would come to pickup and drop the child nearby their home. But because of low income they could not send their child to such attractive schools. Even educated mothers were also not aware of the stress many young children in these schools suffered. Children have to go to schools which are selected by their parents. Parents do not prefer the school which has lots of extra-curricular activities for the children. They used to say that they had paid money for studies not for entertainment especially in the private schools.

A mother's reaction

I had to visit a semi-urban school (psus008) for many days. One day I was testing and observing the children (8 children) of that school. It was about 2:00 am Nepali time and I was having tea and snacks with the teachers in the school's dining room. (This school served Tiffin for all children at low cost and it was compulsory for

all children to have Tiffin at school). One of lady peon (Ayaa didi) came to us in an angry mood and said “Kasto Ama hola!!! Sauteni Ama jastai” (what a mother!!! She seems more like a step mother!!!). One of the teacher asked “ke bhayo” (what happened?). She replied “ke hunu! Bisal ko Ama achanak Nursery class ma gaecha ani uslai matra sutiraheko dekeru uthaera galama thappad hanyo. Bisal ajai roirakeko cha” (Bisal’s mother suddenly entered the Nursery class and saw that Bisal was the only child sleeping there. She woke him up and slapped his cheeks and that Bisal was still crying). It really surprised us all as to why the mother had slapped the child and I asked the peon why the mother acted so. The peon told that “Bisal ko Ama le -sabaijana padhiraheka chan talai matra kati nindra aucha, kati sutna parne? Padauna ko lagi etro paisa tireko cha padnu pardaina bhandai piteko la!!!” (Basil’s mother shouted at her son, “How can you sleep when the entire class is studying!! Why are you the only one that is sleepy!! How much do you have to sleep?” and she explained that she hit her son because she had paid lot of money for his education and he didn’t study enough?).

The mother had come to pay her child’s fees and made a lot of fuss about the issue in the school and was shouting at the staff who were collecting fees. She shouted at the school management stating that they as parents had paid money for study and not for playing and sleeping. The Nursery class room was on the ground floor and after paying the fees she went to the classroom without any permission from the school authority. The accountant thought she went back home but the mother was still there in the class room. The class room was on the way back from accountant’s office. The Principal finally managed to calm her down after convincing her that it was only on that day that Bisal was taking a nap and that otherwise all children take only a short nap of 10 minutes after their Tiffin. Thereafter mother waited for the classes to get over till 3:00pm to take her son back home.

After the incident, the school had a special meeting where, the Principal reprimanded the accountant, the peon, and teachers for allowing the mother to enter the class without permission. The teachers and peons also expressed their grievance with the management that there was no school gate to control the parents and children. One of the peons also mentioned that once a child had even gone back home unnoticed as her home

was close to school. After 30 minutes a teacher found that one child was missing again and then a peon went to the child's home to check. After that incident, the school management finally decided to make a small gate for entering the school and shift the Nursery class onto the first floor. The school had a curriculum where there was play time and rest time, the children sang and danced, while the parents wanted their children to study the whole day. The parents also demanded that there should be a lot of home work for the small children. The school management therefore decided to change the location of the classroom as soon as the week was over.

This incident indicates the attitude of parents towards ECD programmes.

3.5 Anthropometric Measurement of Children

Anthropometric measurements such as height and weights of children were taken to see the growth and health conditions of children. A child's health is a major factor which affects in the overall development. All children's height and weight measurements were taken and data was tabulated and entered in the computer. Mean scores for heights and weights were calculated for each school. Means for different types of schools were also calculated. All scores were converted to Body Mass Index (BMI) also calculated.

Body Mass Index (BMI) is a number calculated from a child's weight and height. BMI is a reliable indicator of body fatness for most children and teens. BMI does not measure body fat directly, but research has shown that BMI correlates to direct measures of body fat. BMI can be considered an alternative for direct measures of body fat. Additionally, BMI is an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems. For children and teens, BMI is age and sex-specific and is often referred to as BMI-for-age.

After BMI is calculated for children the BMI number is plotted on the BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children. The percentile indicates the relative position of the child's BMI number among children of the same sex and age. The growth charts show the weight status categories used with children (underweight, healthy weight, overweight, and obese).

BMI-for-age weight status categories and the corresponding percentiles are shown in the following table.

Table 43: Body Mass Index for Boys and Girls aged 48-50 months

S. No.	Percentile Range	Category
1.	Less than 5 th percentile	Underweight
2.	5 th percentile to less than 85 th percentile	Normal
3.	85 th percentile to less than 95 th percentile	Overweight
4.	Equal to or greater than the 95 th percentile	Obese

All the 200 children had BMI ranging from 12.45-18.8. The total numbers of children falling outside the normal range were 8% (16). Of these 3% (6) were under weight and 5% (10) were overweight. There was no gender differences found among the children of the sample. There were no differences evident between children from different schools-Private or Government. Nor were there differences found in rural, semi- urban or urban settings. The reason for these finding can be attributed to the fact that the selection of sample was based on high level of school attendance for school going children, implying that these children must have had relatively fewer illnesses during the year. Non-school going children also spent most of the time with their mothers who were primarily domestic helpers in well off homes. Food security for these children was also not an issue.

Table 44: Mean Height, Weight and BMI of Children

Code	Total No	Mean Age Month	Mean ht (cm)	Mean Wt (kg) kg	Range BMI	Mean BMI
PRSC	24	48.917	100.313	15.042	12.75-18.8	15.002
PSUSC	24	48.875	98.583	15.038	12.45-17.99	15.548
PUSC	24	49.042	100.792	15.575	12.66-16.88	15.362
GUSC	24	49.000	102.125	15.063	12.86-17.50	14.483
GSUSC	24	49.167	99.000	15.046	12.69-17.56	15.367
GUSC	24	49.000	99.000	14.683	13.22-16.05	14.968
NSGC	56	48.589	97.107	14.221	13.22-16.05	15.072

Government rural school children had mean BMI of 14.48 is at the 35th percentile this also indicate that the children had normal weight. In total number only 6 children were under weight and 10 were overweight while looking at each child individually. A child is considered to be overweight if they have a BMI over the 85 percentile for their age, at risk of becoming overweight if they have a BMI between the 85th -95th percentiles for their age. Underweight if they have a BMI under the 5th percentile for their age. And a child has a healthy BMI if it is between the 5th and 85 percentile. (CDC, 2011)

Based on height and weight the 85th percentile is 16.8 BMI for girl and 16.9 BMI for boys and that is considered overweight respectively for girl and boy. Similarly 12.8 is less than 5th percentile for girls and 12.9 is less than 5th percentile for boys. The Table shows the range of BMI for boys and girls in different settings.

Table 45: Sex differences in Mean Height, Weight and BMI of Children

Code	Sex	total No	Mean Age in months	Mean Age ht	Mean Wt	Mean BMI
PRSC	F	12	48.917	98.667	14.658	15.116
	M	12	48.917	101.958	15.425	14.887
PSUSC	F	12	49.000	98.583	15.125	15.611
	M	12	48.750	98.583	14.950	15.484
PUSC	F	12	49.250	99.833	15.258	15.303
	M	12	48.833	101.750	15.892	15.420
GRSC	F	12	48.833	100.083	14.425	14.437
	M	12	49.167	104.167	15.700	14.529
GSUSC	F	12	49.083	98.750	15.008	15.335
	M	12	49.250	99.250	15.083	15.398
GUSC	F	12	48.917	97.500	14.167	14.884
	M	12	49.083	100.500	15.200	15.052
NSGC	F	28	48.536	97.000	14.189	15.076
	M	28	48.643	97.214	14.254	15.068

Table 46: Comparative Scores on anthropometric measure of Private, Government and Non- School Going Children.

Mean score of Anthropometric measurements**			
Code of Schools*	Age range in months	height	weight
PRS.1	48-50	94.50	14.34
PRS.2	49.13	109.88	16.59
PRS.3	49.13	102.63	14.94
PSUS.4	48.75	94.88	15.10
PSUS.5	48.75	98.25	15.08
PSUS 6	48.75	98.25	15.08
PUS.7	49.00	99.38	15.26
PUS.8	49.00	99.63	15.70
PUS.9	49.13	103.38	15.76
GRS.10	49.13	100.00	14.73
GRS.11	49.13	101.50	14.89
GRS.12	48.75	104.88	15.58
GSUS.13	48.75	95.63	14.60
GSUS.14	49.50	101.50	15.39
GSUS15	49.25	99.88	15.15
GUS.16	48.75	93.13	13.28
GUS. 17	49.12	105.37	15.97
GUS.18	49.12	98.50	14.80
NSGC	48.58	97.10	14.22

(Appendix: H Distribution of All Sample Children on BMI)

4. CONCLUSION

The attempt in this study was to explore the preschool environment available to young children in Nepal. Children's development in selected domains was assessed when exposed to pre-primary school. To understand the cultural context within which the ECCE programme operates, attitudes of school principals, teachers and parents were taken. Various types of preschools, government and private in urban, semi urban and rural areas comprised the sample. Children who were in the age group 48-50 months and had attended a pre-primary school programme regularly comprised the sample. Those children who had no pre-school exposure till 48 months were also part of the sample.

The major findings of the study were:

- The programmes for early childhood development have grown tremendously in Nepal. Although figures are not accurate but children have more access to early childhood education programmes.
- Government schools provide poorer pre-primary education environments as compared to private schools.
- Rural and semi-urban private schools have less facilities available than urban private schools for pre-primary education.
- Non-school going children scored less on most dimensions of the developmental assessment tool. The differences in scores of private school children and government school children on developmental assessment tool were not significant.
- Most children were well within the normal range on anthropometric measures such as height, weight and body-mass index.

I would like to reflect on the findings of the study and contemplate on some of the current debates on Early Childhood Education. The critical concerns cover the following areas:

4.1 Expansion of Preschool Programme and Quality of Preschool Environment

Nepal has received tremendous International funding and national impetus for ECCE programmes and this is evident in the expansion of the programme in the last decade. It is sometimes assumed that the level of funding provided for ECCE is a good indicator of the relative quality of programs. Although there may be some relationship between quality and the financial resources available for improving it but all good programmes need not be expensive. If all resources are used to make buildings and little support is provided to teachers to help them develop and improve their practices there will be little or no effect on quality defined in terms of the educational process and/or outcomes. The Government schools of Nepal are an example of this situation. The survey findings indicate large infrastructure- buildings and play grounds available for running government schools but poor implementation of programme/curriculum.

According to Department of Education, Sanathimi Bhaktapur on 2006 the total number of ECD centers in the whole country was 12,062. Every year the number was increasing to meet the target of EFA programmes in Nepal .The EFA National plan of Action 2001-2015 has set the target of establishing 74,000 ECD centers by 2015. In 2009 the total number of ECD centers throughout the country was 26,523. Private school based nursery classes (preprimary classes) are not included in this number. According to Flash Report 2010/011 there are 31,089 ECD/PPC s in the country, 26,733 (86.1%) ECDs are running as community- based ECD centres and community school based ECD/PPs. Thus rest 4316 (13.9%) of the ECD/PPCs are run by private schools.

From this increasing numbers of ECD centers we can assume that the situation of children is improving, young children are getting ECD based programme for their foundation of life but in practice it is different. In the process of this research work I got opportunities to visit many ECD centers in rural, semi-urban and urban areas of Nepal. There is a legal procedure to start an ECD centers in a community or in government school. After fulfilling the required procedure the Department of

Education will permit the School based ECD centers (For basic teaching learning materials and remuneration) to start functioning.

When an ECD center is established the children of age 3-5 will be benefited, mothers will be free and young girls or ladies will get jobs. So the community people and community development workers try to get the quota to start ECD centers but in some areas parents were not aware and not convinced about the importance of ECD programmes and in some areas Community ECD programmes are not effective compared to private school based ECD programmes. According to parents when a child goes to ECD center he/she should learn the 3Rs. In private schools to please the parents the school management had altered the curriculum to meet parental demands. There are fewer children in community based ECD centers. When the monitoring group from Department of Education or NGOs/INGOs visits the ECD centers the management committee, caregivers or teachers collect the children who are not really enrolled in the centre. The reality is that 31,089 centers do not run. Many are there only in name.

According to *Naya Patrika*. In 49 VDC of Sunsari district there was a monitoring team to get the information about number of schools, ECD centers and enrolment of children at school and ECD centers. According to District Education Officer (DEO) of Sunsari the school brings children from the southern part of Village Development Committee (VDC) (India) to get those facilities from the government. To show enough number of students according to their previous records (which was filled and sent to District Education Office (DEO) schools brought children from India by paying Rs.200 per child. When the date of the monitoring group's visit was fixed children were procured for demonstrating enrolment. Government & private School, Madarsas and ECD centers all do the same thing to show higher enrolment of children in the schools. (Bastola, 2011). From these news items we can assume that the numbers of ECD centers documented from different authorities were not reliable.

In some cases the ECD centers are running smoothly. This is where community workers and parents are aware of children's holistic development and

know the importance of ECD programmes. In some communities parents add money for the remuneration of caregiver and teachers.

Having got an opportunity to interact with community workers, principals and parents in an ECD awareness programme run by a NGO, I asked about the ECD centers in their community. I could not find the exact number of ECD centers of that district which was listed in the *Balbikas Calendar* published by Department of Education. One community worker shared his experience about how when there were no children actually they had to close the ECD center and inform the Department of Education. The closing process was very time consuming. They had to give all the reasons and clear all the account. Once they closed the center and if they wanted to open a new ECD centers there would be a long process to reopen or start a new one.

4.2 Measuring Quality of Preschools Schools

There are many positive and negative observations about ECD centers, but for the future of Nepali children this is a good start. Pre-schools and ECD centers are different from home atmosphere. Here child interact with caregivers, teachers and peer group. There are different activities, rules of conduct and ways of learning.

The modern view of quality allows for “experts” to set standards and develop instruments that can be applied nationally or internationally to measure quality of programs. The post-modern view highlights the subjective nature of quality that requires the definition to be negotiated through a contextualized process of “meaning making” in which all stakeholders have an opinion. From this perspective, a generic notion of quality makes little sense. Establishing a national definition of quality, a national set of standards, and an instrument to monitor quality in all settings then would seem impossible, unless all those who think differently can somehow attain agreement about the meaning of quality through discourse.

I began my research with clearly defined set of standards that constituted quality. The review of researches led me to getting tools that measured quality. Adaptations and modifications for Nepal’s diversity was something I tried to do. Yet the agreement between the expert opinions I gathered through review of literature and the opinions of

other stake holders was not always evident. Therefore did I actually measure quality in the way communities, parents and caregivers in preschools experienced it?

A young child (0-5 years) used to be seen as “little God” in the traditional society of Nepal. The world is filled with believers in the importance of good care and attention for children during their earliest months and years. If there are so many believers in the world, then why is the early childhood programs not receiving support and importance?

The research findings pointed to the variations in opinions about what constitutes a “good” pre-primary programme. A large number of parents did not see the value of sending their children to “play and sleep” in a pre-primary programme especially when they were paying for it. A “good” programme was one in which the children learned the 3R’s, did class work and home work. The children learned to speak and write in English. Most parents admired the uniform, bag and water bottle children carried to school and hoped that someday their children would go to such a school.

Presently in big cities like Kathmandu there are many private pre -schools which are trying to introduce the Montessori methods but are not successful because parents and untrained teachers are more comfortable and have greater faith in the traditional rote learning methods. Children are forced to read and write even before they are physically and mentally mature.

Trained teachers often did not see the value of using the new techniques they had learned during teacher training courses. They were time consuming and old habits of teaching children were simple. Further with no monitoring and regulation, pre-primary classes were just down ward extensions of primary classes. School principals and teachers were political appointments and not much could be done to regulate them.

To assess the quality of the selected preschools the Early Childhood School Environment Observation and Rating Scale (ECSEORS) was used. School environment it is believed plays a major role in the child’s overall development.

In my research work 18 schools were observed. In the physical set up domain only 2 private schools were excellent and other 9 were good. Of these nine schools, 4

were private schools and 5 were government schools. Quality of school buildings, class rooms and indoor outdoor space of government schools was good compared to private schools running in rented buildings. But in sanitary facilities, class room arrangement, and in indoor equipment private schools were good as compared to government schools. Compared to government schools private schools had neat and clean surroundings though space was not enough for the children.

In health and hygiene practices and facilities only 1 private school was excellent and other 3 schools were good. Among three one was a government school and 2 were private schools. Other 14 were poor in health and hygiene domain. There was no lunch or Tiffin program in almost all sampled schools. Only in two private schools there was a lunch program in the school and it was well managed. The school management was aware of the importance of nutrition and neatness and cleanliness in the feeding program. In one private school which has only pre-primary classes, school-provided Tiffin was quite expensive and it was compulsory. In another school also it was compulsory but not so expensive and quality of food also good.

In conceptual /curricular content, private schools were excellent in different activities (Physical-motor, language, cognitive) compared to government schools. Though government schools have enough spaces for the children to play, the teacher does not follow the daily time schedule and they do not give much time for physical activities. But in private schools teachers give ample time to the children for physical and other activities. Compared to rural schools, urban school teachers were more active and give much more attention to children in both government and private school. This was due to urban parents being much more aware and demanding than rural parents.

These results explicitly demonstrate that the school environment was not favorable and in accordance with the requirements. Government is spending a lot of money to improve the quality of buildings, library, science laboratories, toilets, and other physical facilities but money is not used properly and allocating budget for ECD programmes also.

According to Khadka (Khadka, 2011) there is misuse of budget and fake reporting in the construction sector (school extension, toilets, compounds etc.). The evaluation team members from Education department do fake evaluations. The construction is not completed but in the evaluation report the technician reports the completion of the construction work. The school management committee and other member of school prepare the report and they do not use the granted money in the school.

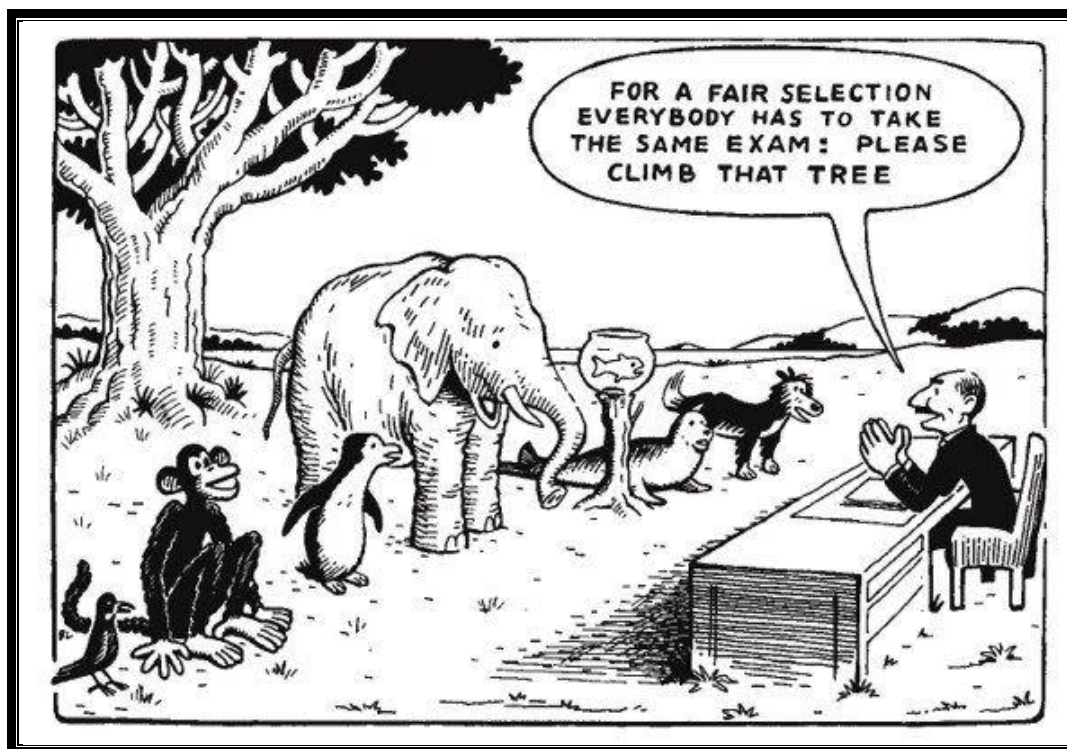
When a school building has to be built the technicians do not sign without taking fifteen thousand rupees. A person from a political party said that from technician to Ministry, schools have to pay extra money to get the fund from the government. Knowing all these matters the District Education Officer does not control this type of functioning.

4.3 Quality defined in Terms of Outcomes

Educational quality is usually linked to outcomes that focus on what happens to a child as a result of their being in a learning environment, whether at home or in an educational service. These outcomes may be defined at different points in time in the life cycle ranging from immediate effects to those appearing well into the adult years. For children in pre-primary programs, the inclination has been to think more in terms of “development” along various related and interacting dimensions. This development allows a child to handle more complicated levels of physical, intellectual, social, emotional and moral activity. The way in which development is defined, both theoretically and practically varies widely reflecting conceptual as well as social and cultural differences. Although considerable emphasis has been placed on intellectual development tests have been heavily weighted toward physical development (fine and gross motor development) while others stress emotional development. More recently, developmentally-related “competencies” are being defined that emphasize the ability to apply knowledge in daily life and within the context of the child.

Most developmental tests have been created with the notion that they represent a kind of scientifically-arrived at and logical representation of the innate nature of

development that can be applied equally to all children. The purpose is to help us determine whether the education of the tested children is of quality or not. The measures I have used to assess outcome also point to a similar construction. Development Assessment Measure I & II attempt to find out whether the children's learning environment in school has developmental outcomes for the children. I was wary about judging children on inappropriate measures and tools. Those that had not originally been developed in the country and always keeping in mind the varied contexts and situation of Nepali children. The quotation below I hoped does not represent my testing method.



Picture 4.1: “Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid” Albert Einstein

The importance of the early years is the formation of intelligence, personality, social behavior and physical development is now acknowledged and recognized through numerous studies. Children who get a good start do better in school and do better as adults. They will be successful in their life by getting good job and being responsible for job and family, community and country. Good early childhood development programme is more necessary for disadvantaged children. Therefore the government based ECD programme must be improved. The well equipped expensive

ECD programmes run by private schools are not reachable by low income group and disadvantaged children. All ECD programme should aim to ensure that children grow up healthy, able to deal with challenges of their lives and become active members of the society.

In most of the government schools classes are overcrowded in Grade one. To reduce the number of young children in Grade one, they started *Shishu Kashchas* (pre-primary class). Today there is more awareness and wave of ECD and Montessori programmes in Nepal. For the government and community ECD centers, there is support programme from the, INGOs, NGOs and Department of Education. To get all the facilities teachers are interested in gathering training but do not apply the methods they learned. In my opinion they are interested only in collecting the certificates which are useful for their promotion in future.

The learning environment is an important and powerful teaching tool of the ECD programme. If the environment is set up with the knowledge of how children learn and develop it can positively support teaching and learning process. If the classroom arrangement, daily schedule, learning materials are good and enough a teacher will not find it difficult to teach and support children in different activities. In an empty class room, where there is only chalk duster and black board a teacher may find it difficult to guide and support children in different activities.

Childhood is the foundation of children for their development. Realizing this fact the Nepal government and other sectors also have put some effort. The government has encouraged setting up ECD centers in the community and schools but they do not provide required facilities and teachers. They do not have child friendly classrooms and resources and teachers are not trained. In some cases teachers have short term ECD training but teachers do not use the methods they learn. Teachers and caregivers' remuneration also is very low. When the school management or Ministry of education decides to spend more money in the ECD centers or preschools there will

be well trained teachers and they will not leave their jobs and make the foundation of young children strong and perfect.

4.4 Pre-primary Programmes of Poor Quality and Outcomes

How do programs of poor quality produce satisfactory outcomes? Teachers often lack training and turnover is high. Curriculum is meaningful in name but not in application. Most group sizes and ratios of children to adults are high. The learning environments are frequently makeshift, often without sanitary facilities and far from secure. Supervision, if present at all, is usually equivalent to inspection. Rarely is it associated with on-the-job training of the teachers who work with the children. Parental participation is low or absent. In spite of this, for example, recent work in both Nepal shows important outcomes of participation in ECCE programs which would not qualify as programs of high quality.

The conclusion from this is not that one should be content with programs of lesser quality but it does suggest that outcomes can be obtained in less than high quality programs. Also where budgets are extremely limited but inequities are great promoting high quality programs available to only a few can only increase inequities.

In brief, it would be unfortunate to put all our emphasis on quality defined in terms of outcomes, however measured. Many factors and numerous environments influence outcomes and it is hard to know how much to credit programmes and how much to family and community environments. A child lives in the present and should be entitled to positive and enjoyable experiences in the immediate environments in which she or he learns and develops.

For this research work 144 school going children from Government and private school of different areas (urban, semi-urban and rural area) were taken and 56 non school going children were also in the sample. After observing and testing the children's physical, emotional, cognitional, activities and language development it was clear that the school going children were confident and responsive in comparison to non school going children. Though there were differences in all kinds of development in the children. These differences are not only influenced by school they

are affected by family environment, school environment, heredity factors and individual differences. However what was evident from the study was that going to school did influence the selected indices of development. Enrolment in any type of pre-school or ECD centers whether it was well equipped or poorly equipped led to a child learning many things.

While going to a pre-school or ECD center a child from rural areas gets an opportunity to watch nature like different animals, birds, trees and plants, rivers, stream under the guidance of an adult. He /she learn many more things from the elders in the school. They learn school rules and regulation, entering the class in time, waiting for their turn while playing or going to toilet or drinking water. A child learns many songs, rhymes and dance, learn to listen and tell story. The children's added exposure promotes several areas of development as visible in the differences on DAM I & II between children who were going to school and those not going to one at all.

Few mothers reported that though the school environment is not satisfying for them the children learned basic things at school. They learn to talk and share their experiences. They learn to share their home problem with the teachers and friends; they learned to be friendly with others. The interaction with teachers, caregivers, peers and elders helps children's development.

Non school going children also learned in accordance with their age. While observing and testing them I spent lot of time to understand them. Though they do not know the names of colors on the chart and counting but they have a sense of small-big, long- short, many-few etc. They had enough time for playing and exploring the world around them. Most of the non school going children in the sample were from low income families and their mother were working as maid in others homes. A child's holistic development is affected by the environment they are exposed to. In some cases the child's mother was working in locations where the child was exposed to a lot of latest equipment and technology. The child could pronounce the names of kitchen and other electronic equipment clearly like-refrigerator, oven, microwave, pressure cooker, iron, vacuum cleaner etc. They knew names of many food items, names of vegetables and fruits. One girl knew the difference between tea and coffee.

There was a question in verbal information domain:

“What are the ingredients for cooking dal?”

When I asked the girl the question, she explained so nicely as if she could cook. Her answer was like an adult. She explained about the color of turmeric. This girl had lot of practical knowledge and was friendly, talkative but she was weak in other performance items which children get exposed to only in school. If any intelligent child gets an opportunity to be in an ECD center at the right time they will be able to score high in every area tested.

We who work with children and are concerned with children and expect that the ECD programme would help schools in improving children’s cognitive, social and emotional development before they reach Grade one or in formal schooling. Much research work has proven that investment in ECD for young children pays a high public return. Researchers in the field and early childhood educators both view the parents as integral part of the early childhood education process. Often educators refer to parents as the child’s first and best teacher. Caregivers and teachers must uniquely care for each child using developmentally appropriate practice, individually appropriate practice and culturally appropriate practice.

Work with young children is challenging. Those who work with young children agree that development and education are inseparable at this age. Young children seem to favor and appear skilled at learning through touching, feeling and through vision. Maria Montessori noted this characteristic in young children and applied it to instruction. The materials designed by Montessori all involve manipulation of objects as a means to develop all the senses. Materials used in this approach encourage perception of color, shape, size, texture, sound, and other attributes through the manipulation of concrete materials. In sensory involvement, all the senses are used to bridge the concrete with the abstract.

4.5 The Needs and Rights of Children

The basic needs of children differ from that of the rights of children. Yet they involve the same categories to be included in a program to assure healthy child

survival and development. This view helps to define content. School must have a responsibility for planning safety, health, and nutrition programme for young children. Nutritious food, happy pleasant time, pleasant atmosphere and provide an opportunity for children to develop independence. Young children develop gradually in their eating habits or behavior.

Poor health and physical condition weaken appetite. Physical condition is a critical aspect in the life of children. If children proceed in a normal rate, they will be able to keep up with the activities of their peers. Every child goes through the same basic pattern of physical growth, but there is a wide range of normality. Parents, caregivers and adults who work with children have responsibilities related to children's physical growth, nutrition, safety, and health care. (Marotz, Cross, and Rush, 2001) state that "health, safety, and nutrition are closely related because the quality of one affects the quality of others".

Caregivers, parents and children need information on topics such as toy safety, the importance of eating regular meals, benefits of exercise and cleanliness. They need to learn how to dressing appropriately for the weather and dental care. Tasting, touching, preparing, and eating variety of food is also important. Children enjoy participating in preparing and tasting food.

Undernourished and malnourished children lack the muscle strength skeletal development necessary for physical motor activities. Overweight children may also have limited development. Therefore ECD programme for children should give much importance to all these aspect.

4.6 Investing in Future

The reason for investing in Early Child Development (ECD) programmes are numerous and interrelated. A child's ability to think, from relationships, and live up to his/her full potential is directly related to effect of good health, good nutrition, and appropriate stimulation and interaction with others. A large body of research has proven the importance of early brain development and need for good health and nutrition. (Heckmen & Cameiro, 2003)

Early childhood development must be part of every nation's vision for future. Further, ECD policies and investment must be long term- for the return on these investments will come over 20-30 years. The results from longitudinal studies and economic analyses continue to strengthen the rational that ECD programme are a productive investment and a business imperative in a global knowledge economy. Whether in a developing or industrialized country, the business community must invest in ECD initiatives to assure productive and competitive work forces.

To bring ECD programs and policies to scale, effective ECD programs must be given sustained support- from national, international bodies. Quality ECD programs are costly and they cannot be expected to measure, regionally or nationally, without additional funding and resources including trained personnel, adequate facilities and educational materials.

Dollars invested in ECD yield extraordinary public returns. The quality of life for a child and the contributions the child makes to society as an adult can be traced to the first few years of life. From birth until about 5 years old a child undergoes tremendous growth and change. If this period of life includes support for growth in cognition, language, motor skills, adaptive skills and social- emotional functioning, the child is more likely to success in school and later contribute to society (Erikson M.K. Reimer, 1999).

Authorities finance ECD by employing teachers and facilitator, caregivers, constructing facilities, sponsoring the training of teachers and facilitator and providing materials and equipment. In wide range of ECD programmes that reports significant, positive, long-term effects is very encouraging. ECD programmes can have indirect positive effects on parents by freeing them to work or study and can have direct effects when they incorporate parenting classes and support

ECD intervention definitely adds values to children's lives in many ways. The period up to 8 years of age is of supreme importance for emotional, intellectual and social development. Intervention at this age can have strong and lasting impact on the health and welfare of adults. Research findings from many countries that supported the position that early childhood development programme can make a

highly cost effective contribution, not only to learning in school but also the overall development of a child into a balance adult who contributes positively to a nation's development. These effects are particularly strong for children from disadvantaged or disrupted home backgrounds caused by poverty, low levels of parental education, conflict or other stressful situation (Hyde & Kabiru, 2003).

4.7 Leadership and Management of Programmes

Principals are responsible for communicating their school's mission, goal and policies to teachers, parents, community and elder students of the school. Principals are autonomous making decisions in most of the private schools of Nepal. Because there no financial and other support from government for the private schools. But in government schools of Nepal principals are not autonomous. Sometime principals were also appointed politically and in some cases other politically active people were appointed as teacher or vice principals. So there were difficulties handling the teachers in government schools. The role of principal in a school is to lead and manage the planning the monthly and yearly academic programmes. A principal is accountable for the overall leadership, management and development of the school within statewide guideline and Government policies. All principals are to ensure the delivery of high quality education programme in school. He/ she can manage and integrate the resources available in school. A principal can involve staff, parents and community people in the development and implementation and review of school policies and programmes.

For the development of a school management, a principal can play vital role but in the government schools the principal were found dissatisfied with their own work. Teachers were not in his/her control. They were not regular and did not finish their course in time for the senior classes. They always blamed to school management only. In pre-primary classes also teacher did not apply the techniques they learned in the ECD training.

In rural and remote areas the monitoring and supervision is not feasible. When a monitoring team plans to visit a school for supervision they have to inform the school and school manage many fake arrangements like: showing fake children in the class, fake report of school construction etc. in some school principal were responsible for all these fake work and in some schools school management do this type of work. Almost all the

principals were very much aware of ECD programme, they were interested in running ECD classes according to ECD requirement, but the teachers and caregivers were not interested in following the ECD techniques. It may be because of the ease in using traditional methods. In traditional or teacher directed teaching methods learning is about memorizing. So learning is boring for the children. Most teachers liked teacher directed techniques because it is easy to prepare lessons (just writing on the blackboard, showing the charts and repeating), teachers have control over what is being taught, teaching is confined to classrooms and easy to test against material taught. They feel they have control over the children in the classroom. In child centered learning process children enjoy learning about what they are interested in, children are active in the learning and learning is discovering, investigating, asking many questions and looking for solutions. Using these techniques children are able to develop a sense of confidence and empowerment with their learning; children are able to learn individually and at their own pace. Children like challenges and they respond to questions. Child centered learning encourages independence and learning is positive. Actually in child centered learning it is exciting to watch children; teachers do not need to be very active they are just facilitators so they have to observe the children discovering new knowledge. Teachers can enjoy working with children. Teachers have a clear role when working with the child centered learning environment, and these roles includes demonstrating, questioning, promoting, praising, encouraging, describing, listening and giving feedback.

When parents ask about the progress report it is difficult to say exactly what has been taught so the teacher and school management do not prefer child centered learning technique.

Within the research period I got opportunities to talk with mothers who were interviewed and some who were not included in sample. According to them they want to send their children to a well equipped preprimary school or ECD centers but because of their economic condition they were not able to send them. According to them to send a child in a good preprimary school means children will be able to speak in English, looks smart (because of nice uniform) etc.

Most of mothers in Nepal are not very educated especially in semi-urban and rural areas. They are unable to articulate the benefits of a good ECD programme for the future of child. Often both parents are busy, they have to work for a living and most of them are not in joint or extended family. Therefore they have to send their children to pre-primary schools near their home. The urban mother is more aware of the value of a good ECD programme compare to semi-urban and rural mothers. But in practice they also need academic result for their children. According to teachers and principals, mothers always compared their children with the child living nearby and who goes to another school.

We wish quality education but do not want to invest wisely in education especially in early childhood education. When a school management or a principal appoint a teacher in school they do not care whether he/she have been teaching well or not. How teachers behave with children and how children are learning neither school management, nor principal care especially in government schools of Nepal. Private school principals are independent to take decisions in hiring and firing of teachers therefore getting greater accountability.

Discrimination based on caste and gender have been traditionally hampering female education in Nepal. Absence of a stable government has sidelined and politicised education in the policy-making. Nepal shares with India a caste system in which discrimination is still a fact of everyday life. Caste and gender remain the major barriers to education. If you are a girl from a Dalit or an indigenous family, you are unlikely to go to school or complete primary education.

At the other end of the spectrum, power and money is largely concentrated in the hands of the Brahmin caste, including most senior politicians and the new Maoist prime minister, Baburam Bhattarai. This is compounded by an absence of elected local government, which has led to the politicisation of schools. The chair or membership of school management committees is often sought to assert and retain power locally.

Local education officials therefore spend most of their time firefighting political problems. As a result, the capacity to implement change and drive up

standards is poor. Teacher management is weak and teacher recruitment is often political. A previous education minister was sacked for taking backhanders for appointing temporary teachers.

However, there are some flickers of light. Despite the political instability, recent progress has been made in enrolling children in primary education in Nepal. The World Bank estimates that in 2009 the enrollment rate in primary education was 90%, compared with 74% four years earlier. Local community leaders at the primary schools

The power to drive through these changes at a local level requires a stable central government, effective local administration and politicians willing and able to prioritise education. Agreements on the country's new constitution, its political system and disarming Maoist ex-combatants must be urgently concluded. Only then can a stable Nepalese government emerge.

Children are the most important asset of any country and the most important human resource for overall development of the country. Schools are an external medium that helps children acquire new knowledge and skills to grow into a productive and capable citizen. Joyful and happy environment promotes diversity in learning. If we desire to overcome the problems of education in Nepal we must focus on early childhood education of young children because that is the foundation. To make this foundation strong ECD strategies must be clear, caregivers or teachers must be well trained, parents and community people must be aware of needs of children. National policies and frame work must be flexible, and reachable to children from low income group and disadvantaged sections of society.

Achieving the vision of global, regional and country-level equity for ECD requires attention to the child, family and broader contextual roots of positive health, learning and behavior in the first years of life. This perspective from developmental science has led to the consensus that integration of services across health, nutrition, education, child welfare, protection from violence, as well as attention to the economic well-being of parents and caregivers. This is termed as social protection are required across the entire early childhood period.

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APPENDIX A

Numbers of schools by eco belts (in Unites and level) 2010/011

SN	Eco belt	Schools			
		Total School (Unites)	Primary level (Grade 1-5)	Lower Secondary level (Grade 6-8)	Basic Level (Grade 1-8)
1	Mountain	4,102	4068	1221	4095
2	Hill	17011	16,876	5600	16960
3	Kathmandu valley	2213	2076	1507	2093
4	Tarai	9834	9664	3611	9717
5	Nepal	33160	32684	11939	32865

Source :Flash I Report -2010-011

Number of primary, lower secondary and secondary school in
Kathmandu District, 1997-2006

Date	primary	Lower secondary	Secondary	Total
1997	804	429	295	1528
1998	942	553	396	1891
1999	1014	583	417	2014
2000	1014	583	417	2014
2001	918	641	480	2039
2002	918	640	479	2037
2003	918	640	479	2037
2004	920	671	514	2105
2005	1021	699	558	2278
2006	991	718	554	2263

Source : Statistical year book of Nepal 2007 p.241

APPENDIX B

Numbers of ECD Centers 2006-2010

	Districts	2006	2007	2008	2009	2010	NGO, INGO
1	Acham	150	202	277	377	397	Unicef
2	Arghakanchi	90	138	272	332	352	
3	Baglung	115	175	227	272	304	-
4	Baitadi	127	177	259	359	379	-
5	Bajhang	100	132	168	218	248	-
6	Bajura	83	105	153	203	213	Save.the childrenNorway
7	Banke	215	305	343	413	445	Plan Nepal
8	Bara	185	280	337	437	499	Plan Nepal
9	Bardiya	307	372	450	575	595	Save.the childrenNorway
10	Bhaktapur	70	89	121	146	156	-
11	Bhojpur	102	124	161	201	232	-
12	Chitawan	361	401	460	510	530	Unicef
13	Dadeldhura	174	185	205	240	260	Unicef
14	Dailekh	118	161	224	274	307	-
15	Dang	259	345	432	507	539	Unicef
16	Darchula	63	100	165	195	215	-
17	Dhading	175	264	355	455	475	-
18	Dhankuta	155	179	220	255	275	
19	Dhanusha	250	367	454	554	599	-
20	Dholakha	100	142	180	230	250	-
21	Dolpa	16	31	48	78	88	-
22	Doti	121	172	235	275	305	-
23	Gorkha	127	189	265	325	345	-
24	Gulmi	168	233	327	417	437	-
25	Humla	39	22	66	96	106	Unicef
26	Ilam	241	272	318	393	413	Unicef
27	Jajarkot	79	121	179	219	239	
28	Jhapa	426	484	536	611	641	-
29	Jumla	79	100	118	148	158	
30	Kailali	416	571	711	816	836	Save the children US
31	Kalikot	32	77	130	175	195	-
32	Kanchanpur	344	395	423	473	503	Save the children US
33	Kapilbastu	231	295	365	440	484	Unicef
34	Kaski	171	221	266	316	347	Unicef
35	Kathmandu	138	178	221	246	286	-
36	Kavre palanchowk	263	313	361	416	446	Unicef ,Save.the childrenNorway
37	Khotang	102	155	215	265	296	-
38	Lalitpur	116	153	193	243	273	-
39	Lamjung	130	177	219	249	269	Save.the

	Districts	2006	2007	2008	2009	2010	NGO, INGO childrenNorway
40	Mahottari	175	292	336	436	486	
41	Makawanpur	148	216	288	553	573	PlanNepal
42	Manang	7	9	14	19	24	-
43	Morang	445	565	709	834	865	Plan Nepal
44	Mugu	19	42	49	79	100	-
45	Mustang	17	29	34	39	44	-
46	Myagdi	95	109	139	174	194	-
47	Nawalparashi	279	354	429	509	543	Unicef
48	Nuwakot	153	186	316	416	436	E.T.C.
49	Okhaldhunga	138	156	194	234	254	
50	Palpa	114	164	250	340	360	Save.the childrenNarway
51	Pachthar	127	156	199	249	269	-
52	Parbat	102	147	215	255	25	-
53	Parsa	185	264	330	405	450	Unicef
54	Pyuthan	144	190	250	290	321	-
55	Ramechhap	138	175	236	291	311	-
56	Rasuwa	33	37	52	72	82	E.T.C.
57	Rautahat	133	204	276	376	396	Plan Nepal
58	Rolpa	165	186	233	268	300	-
59	Rukum	108	128	186	221	252	-
60	Rupandehi	280	397	511	586	631	-
61	Salyan	114	170	211	251	281	-
62	Sankuwasabha	72	108	155	190	210	-
63	Saptari	285	357	397	597	629	Unicef
64	Sarlahi	215	317	386	486	546	-
65	Sindhuli	173	206	259	329	360	-
66	Sindhupalchok	95	141	201	251	284	-
67	Siraha	295	370	427	527	571	Save .TheCh.US
68	Solukhumbu	35	90	121	161	181	-
69	Sunsari	290	410	485	565	648	Unicef
70	Surkhet	271	303	341	391	411	Save.the childrenNarway
71	Syanga	318	358	412	452	472	-
72	Tanahun	180	207	231	281	314	Unicef
73	Taplejung	89	116	158	208	228	-
74	Terathum	53	81	116	166	186	-
75	Udayepur	134	164	218	318	349	Unicef
		12062	15806	20023	24773	26523	
	Source: Balbikas calendar (2063-067)						

APPENDIX B1

Total number of ECD/PPCs by types and eco -belts-2009

SN	Eco belt	Community based ECD centers	Institutional (Private) ECD centers	Total
Centers				
1	Mountain	1824	88	1912
2	Hill	8835	1003	9838
3	Kathmandu valley	558	1069	1627
4	Tarai	8806	1976	10282
	Total	20023	3636	23659

Source : Flash report 2008/09

Total number of ECD/PPCs by types and eco -belts-2010/0011

SN	Eco belt	Community based ECD centers	Institutional (Private) ECD centers	Total
Centers				
1	Mountain	2626	189	2815
2	Hill	11996	1420	13416
3	Kathmandu valley	715	1075	1790
4	Tarai	11436	1632	13068
	Total	26773	4316	31089

Source :Flash I Report -2010-011

APPENDIX B2

Community ECD Centers in Kathmandu district in 2008

S. No.	Name of ECD centre	Area	No
1	Janasarokar Tatha Anusandhan Kendrea	Koteshwor	2
2	Shitu Shandhya	Kalimati	1
3	Mahila Tatha Balbalika Ko Lagi Swastha Ra Siskcha	Teku	1
4	Atma Milan Sangh	Balaju	1
5	Launa Kehi Garau	Gausahala	1
6	Baikalpip Shrizana Nepal	Manahaiju	1
7	Melmilap Sahayog Manch	Thamel	1
8	Nepal Mahila Sangh	Kirtipur	1
9	Samajik Tatha Arthik Bikas Kendra	Koteshor	1
10	Bikas Ko Lagi Samajik Uttan Karyakram	Dakchinkali	1
11	Suryodaye Balbikas Kendra	Ka.Na,Pa.-14	1
12	Shristhi Balbikas Kendra	Kirtipur	1
13	Samaj Dudhar Kendra	Ka.Ma.Na,Pa.-14	1
14	Jagriti Pratisthan	Shinamangal	1
15	Samajik Thatha Arthik Batabarniye Bikas Sanstha	Chaimale	1
16	Monika Balbikas Kendra	Mahankal	1
17	Suyog Balbikas Kendra	Kirtipur	1
18	Setogurans Balbikas Kendra	Kirtipur	1
19	Ichangu Naraena Bachat Tatha Rin Sahakari Sanstha	Thankot	1
20	Mahadeva Sthan Ga.Bi.Sa	Talku	1
21	Laligurans Balbikas Kendra	Naksal	1
22	Swastha Sickcha Tatha Batabaran Samrakchan Thatha Kendra	Pharping	1
23	Bal Bhoj Karekram Nepal	Dhalko	2
24	Kopila Balbikas Kendra	Katmandu	2
25	Ka.Ma.Pa.	Kathmandu ,Baudha	1
26	Nepal Nimukha Babbikas Shikcha Uttan Sanstha	Lajimpat	2
27	Kothep Tol Mahila Samuha	Shesh Naraena	1
28	Swoyembhu Club	Swoyembhu	1
29	Sano Majuwa Balbikash Kendra	Vhim Dhunga	1
30	Talku Balbikas Kendra	Talku	1
31	Soemsebi Aviyan Nepal	Sangla	1
32	Dhapashi Samudaik Adhyan Kendra	Dhapashi	1
33	Manamohan Smriti Bikas Kendra	Dhapashi	1
34	Bal Tatha Mahila Jana Chetana Samaj	Samakhushi	1
	Total		38

source: DOE Kathmandu -2008

APPENDIX C

EARLY CHILDHOOD, SCHOOL ENVIRONMENT OBSERVATION AND RATING SCALE (ECSEORS)

Name of school _____

Date : _____

S.N.	Indicator	Scoring			
A.	Physical set up				
1.	Location	1	2	3	4
a.	Distance of school from home	Away from community (far from children's residence) difficult to reach.	Situated in the interior in a residence. Assess not easy.	Situated in a residence. Assess is easy.	Near children's residence. In an independent unit, easily assessable.
b.	Quality of building	Pre-primary school/day care center is running in thatched cottage in dangerous condition (leaking roof, straw shed, poor condition of windows and doors) without any basic amenities or room for the school.	Pre-primary school/day care center is functioning in small concrete building in need of repair with no basic amenities of toilets, water and electricity.	Pre-primary school/day care center is functioning in concrete building with at least two rooms, one for activities and one for storage, toilets, water and electricity.	Pre-primary school /day care center is functioning in concrete building in good condition with usable toilets, adequate and safe drinking water and electricity with enough rooms to accommodate all children.
c.	Maintenance and safety of building	Building very dilapidated (chipping of wall, no whitewash, cobwebs, dampness on walls/ceilings, leaky roof uneven flooring) and unsafe.	Building somewhat dilapidated but safe to carry out daily activities.	Building is safe, somewhat pleasant to be in. But not well maintained.	Building safe, pleasant and well maintained.

S.N.	Indicator	Scoring			
2.	Surroundings				
a.	Noise level/Distracting sounds	Sounds from outside sources prevent hearing of speech all the time.	Sounds from outside sources prevent hearing of speech more than half the time.	Sounds from outside sources do not prevent hearing of speech.	Away from distracting sounds.
b.	Safety <ul style="list-style-type: none"> • Vehicular traffic • Open well/pond • Animals • Open sewer holes/drains • Dug up area in the vicinity 	All the mentioned.	2-3 of mentioned.	1 of the mentioned.	None of the mentioned.
c.	Cleanliness <ul style="list-style-type: none"> • Garbage dump • Stagnant water providing breeding place for flies • Defecation/urinating area. • Fowl smell due to other reasons (meat shop, vegetable market, carpet factory and others). 	All the mentioned.	2-3 of mentioned.	1 of the mentioned.	None of the mentioned.

S.N.	Indicator	Scoring			
3.	Outdoor space				
a.	Space for children.	Not available at all.	Not adequate space for all children. Free space also not properly utilized.	Enough space for both, unorganized as well as organized activities but not utilized at all.	Enough space for all children for all kinds of activities and well utilized.
b.	Safety	Unsafe, not fenced, hazardous stones, glass pieces, thorny bushes.	Safe but not fenced.	Safe, fenced with presence of few hazardous material.	Safe, fenced and clean (without any hazards).
4.	Sanitary facilities				
a.	Toilet facilities	No toilet available. Children go home if living nearby or go in the open space available.	Toilet available outside the school at a distance & used only by the staff.	Toilet is available within the premises and in usable condition. Common for children and staff.	Child sized toilet available and separate toilet for staff.
b.	Washing facilities	No facilities.	Water stored in tanks and has to be taken out for use.	Washing facility available but children need assistance.	Child sized washing area available.
c.	Availability of water	Water is not available.	Water is brought from far of place and stored to fulfill daily requirements.	Water is available but not plenty for use.	Water is available and plenty for use.
5.	Indoor space				
a.	Space for child	Too little space available for the children for any type of activities.	Space is not adequate for all children. Ample space for sitting activities.	Space is adequate for the children as well as for activities but not well utilized.	Ample space available for all children for all activities and well utilized.
b.	Ventilation	Room very suffocating, no fresh air.	Room is stuffy but circulation of artificial air through fans.	Free circulation of artificial air, room somewhat comfortable. Windows not sufficient in number.	Free air circulation and room comfortable. Sufficient number of windows.

S.N.	Indicator	Scoring			
c.	Safety	Classroom has plenty of hazardous material like loose wires, low fans, chairs and tables with sharp nails. Cooking area inside the classroom.	Classroom has some hazardous material. Cooking area inside the classroom.	Classroom has no hazardous material but cooking area is inside the classroom.	Classroom has no hazardous material and cooking area is not inside the classroom
d.	Cleanliness	No effort to make room clean.	Efforts taken to clean the room but not properly swept.	Room swept and mopped once in a day.	Room neat and clean, swept and mopped more than once.
e.	Room arrangement	Room is cluttered. Equipment is spread haphazardly.	The room is neatly arranged but there is no provision for interest area.	The room is neatly arranged and few interest areas are there.	The room is well arranged with well defined interest areas. More than two play areas (doll house, sand pit, activity corner).
f.	Seating arrangement	Arrangement of seats uncomfortable, all children cannot be seen, movement not possible.	Arrangement of seats uncomfortable but does not allow easy movement.	Seat arranged in rows, flexible and all children can be seen. It allows easy movement.	Seat arranged in circular fashion, quite flexible and allows easy movement.
6.	Indoor equipment				
a.	Furniture: <ul style="list-style-type: none"> • Chairs • Tables • Dairies • Blackboards • Bulletin boards • 	None of the mentioned.	1-2 of the mentioned.	3-4 of the mentioned.	All of the mentioned.

S.N.	Indicator	Scoring			
b.	Usability <ul style="list-style-type: none"> • Sufficient number • Good condition • Durable • Child sized • Multipurpose in nature 	None of the mentioned.	1-2 of the mentioned.	3-4 of the mentioned.	All of the mentioned.
c.	Storage space <ul style="list-style-type: none"> • Cupboards • Almirahs • Shelves • Trunks • Racks Space for storage of personal belonging of teachers and children (children's lunchbox, bags, bottles, teachers' belongings).	Placed on the floor. No of cupboards, shelves, trunks available.	Few open shelves/racks available. Only some materials can be stored.	Adequate no of trunks /cupboards/almirahs available but not properly utilized.	Sufficient space for storing all kinds of materials and properly utilized and organized.
d.	Display colorful decorations with pictures and display of children's interest (charts, drawings, posters).	No display of any kind.	Some minimal wall hangings or posters (not of relevance to children)	Standard charts and child related displays made by the caregiver.	Standards charts, display made by the caregiver as well as children's work are displayed.
B.	Hygiene Practices and				

S.N.	Indicator	Scoring			
	Health Facilities				
1.	Hygiene Practices				
a.	Assistance in toileting	No help is given to the child.	Helpers available but do not guide and supervise children. Caregivers manage children on their own.	Helpers / caregivers guide and supervise children sometimes.	Helpers / caregivers always guide and supervise children.
b.	Toileting and hygiene practices	Mother is called or child is sent home.	Caregiver helps child during toileting without any emphasis on hygiene or neatness along with verbal rebuke.	Caregiver uses hygienic practices during toileting but performs tasks mechanically. She performs tasks rapidly with distaste with verbal rebuke.	Child and caregiver have a pleasant relation during toileting. She handles children gently with love and care. Absence of verbal rebuke. Caregiver focuses on teaching hygiene practices and talks generally to children.
c.	Schedule for toileting	No schedule	When child asks then he is sent.	Child is sent at least once a day.	Child is sent once or twice a day with attention of the needs of individual child.
d.	Personal grooming and cleanliness (wiping nose, combing hair, cutting & cleaning nails)	Caregiver not concerned and gives no attention to basic grooming and hygiene of the children.	Caregiver has no prior preparation to look into this aspect and routine checked once in a fortnight.	Caregiver has made arrangements to look into grooming and hygiene of the children but routine is checked once or twice a week.	Caregiver takes special care of children to ensure that they are neat and clean. Checked everyday for all children.
2.	Health facilities				
a.	Rest/naptime/sitting arrangement	No scheduled time for rest. Even if any prior arrangement, children cannot sleep as the floor is uneven.	Time allocated for rest according to the schedule but space inadequate for children to sleep. Children sleep on bare floor.	Schedule allows for flexibility to respond to individual needs. Space is inadequate for all children to sleep. The floor is covered with mat.	Children are helped to relax, individual care is provided. Children sleep on mat. Space is adequate for all children to sleep.

S.N.	Indicator	Scoring			
b.	Periodic health checkups <ul style="list-style-type: none"> Children Staff 	Not at all. Not at all.	Yearly. Yearly, only for specific cases.	Quarterly. Yearly for all cases.	Monthly. Six monthly for all cases.
c.	Isolated areas for sick children	No area.	Area is there but attention is not given.	Care taken to give individual attention and separate area is provided.	Care taken to give individual attention and separate area is provided. Parents are advised to keep the child at home.
d.	First-aid facility available	No first-aid facility available. If hurt child is sent home.	First-aid help is taken from nearby organization or dispensary.	First-aid box available but utilized for few serious cases.	First-aid box is utilized. It is checked and refilled regularly.
e.	Trained staff to handle emergency	None.	Staff is not trained to handle emergency situations but they take help from nearby organization.	One person visits regularly to attend to emergencies.	Trained staff presented to handle the emergencies situation.
f.	Health awareness programs for <ul style="list-style-type: none"> Staff Parents 	None.	Held once a year.	Once quarterly.	Monthly/half yearly.
3.	Nutritional facilities				
a.	Organization and serving of food	No organization for distribution of food. Food is served in demanded manner (Food thrown or abusive language is used).	Organized distribution of food (children seated in rows or circle) but food served in demanded manner.	Organized distribution of food. Food served in proper manner (no scolding or beating).	Food served in friendly manner. Adults interact in positive manner.

S.N.	Indicator	Scoring			
b.	Quality of food	Very little food is served to children.	Food served for children is inadequate.	Food served for children is adequate but second serving is not given if asked.	Food is served in quantity according to age. Second serving is given if asked.
c.	Monitoring and supervising during mealtime	Caregiver not present most of the time.	Caregiver is present but children are not supervised. No care is taken to see whether children are eating or not.	Caregiver is present and children are supervised. Caregiver does not initiate any type of interaction. Care is taken to see whether children are eating or not.	Caregiver takes mealtime as an opportunity to teach concepts like sharing, cleanliness, personal hygiene, balanced diet and cooperation. She encourages children to finish their food positively at the center.
CONCEPTUAL / CURRICULAR CONTENT					
1.	Program				
a.	Teacher/child ratio	More than 1:40	More than 1:30 but less than 1:40	More than 1:20 but less than 1:30	1:20 or less than this
b.	Program planning	No planning	Yearly planning	Monthly planning	Weekly planning
c.	Follow up program	No care is taken to plan and follow scheduled program.	Planned schedule followed with inconsistency. Activities conducted according to caregiver's convenience rather than child's interest.	Teacher strictly goes by schedule without any modifications or changes.	Schedule is followed along with modifications and there is flexibility in the curriculum.
2.	Activities conducted				
a.	Appropriateness of activities	No activities conducted and no age appropriate activities.	Same activities are conducted for all age of groups.	Few activities are conducted for a particular age group along with some common activities.	All activities are conducted according to the developmental needs of the different age groups.

S.N.	Indicator	Scoring			
b.	Planning for non-academic activities (painting, clay modeling, thumb printing)	No emphasis on creative activity.	Creative activities are planned but not implemented.	Very few activities are conducted due to lack of material.	Plenty of activities are conducted.
c.	Time allocated for activities (non-academic painting, drawing, block printing, thumb printing, beading clay modeling)	No time devoted.	Less than 15 minutes a day devoted.	Up to 30 minutes a day devoted.	More than 30 minutes a day devoted.
3.	Balance of activities				
a.	Action and quiet, rigorous with quiet activities	Absence of any focused/meaningful activities.	Addresses only one kind of development in activities.	Focuses on only two aspects of development. Only sometimes, a quiet activity is followed by a rigorous activity and vice versa.	Activities address all round development of children. Action oriented activity followed by a quiet activity and vice versa.
4.	Evaluation				
a.	Maintenance of records <ul style="list-style-type: none"> Child records-health records / nutrition record / development record / progress record Administrative records-attendance record / stock, financial record 	Caregiver does not maintain any records of children.	Caregiver maintains very few records (1-2).	Caregiver maintains some records (3-4).	Caregiver maintains all the records of children with respect to various aspect of development.
b.	Assessment of children	No assessment of children.	Assessment of children on yearly basis through written test or exams.	Assessment of children on monthly basis through test.	Children are assessed daily on the basis of performance in class. Creative worksheets are prepared to help slow learners.

S.N.	Indicator	Scoring			
5.	<u>Teaching learning material</u>				
a.	Equipments / material for activities	No material for any activities.	Materials available but not rotated among children.	Material rotated among the children but not sufficient for all the children.	Sufficient material available and rotated among the children.
b.	Nature of materials	Materials unavailable & unusable.	Materials available but not in usable condition (torn, broken, not functional).	Only commercially produced materials available.	Low cost, teacher prepared materials along with commercially produced materials.
c.	Variety in teaching -learning materials: aids <ul style="list-style-type: none"> • Charts • Books-pictures/text • Picture cards • Flannel board • Flash card • Puppets • 3-D objects • Real objects • Functional Blackboard	None / 1-2 of the mentioned.	3-4 of the mentioned.	5-6 of the mentioned.	7-9 of the mentioned.
d.	Equipments <ul style="list-style-type: none"> • Notebook / waste paper • Slates • Chalk • Crayons • Paint brush / water color 	1-2 of the mentioned.	3-4 of the mentioned.	5-6 of the mentioned.	7-9 of the mentioned.

S.N.	Indicator	Scoring			
	<ul style="list-style-type: none"> • Clay • Pegboards • Blocks • Puzzles • Beads • Cubes 				
e.	Use of teaching-learning material	Teaching aids are not used at all.	Only the caregiver uses some teaching aids for teaching.	Caregiver uses aids for teaching children in groups.	Material used both by the caregiver as well as children are given to handle by children. Caregiver uses all the available material effectively.
6.	<u>Teaching methods, style and behavior</u>				
a.	Teaching methods <ul style="list-style-type: none"> • Lecture method • Play way method • Discussions • Demonstration • Questioning • Project method • Activity method 	Caregiver uses either rote?-repetition or one-way monologue to each.	Caregiver uses two-three methods for teaching but does not encourages children's participation	Caregiver uses four-five teaching methods, involves the children in the activities.	Caregiver uses five –six teaching methods, encourages active participation of children. Teachers encourage queries.
b.	Participation of children	Caregiver does not allow children to participate.	Caregiver allows children to participate but does not encourage children.	Caregiver encourages children to participate in various activities.	Caregiver plans various activities, which allows children to explore and share and give time for personal conversations. She praises the children who participate and listens the them.
c.	Individual attention towards children	Caregiver does not provide individual attention.	Caregiver rarely provides individual attention.	Caregiver sometimes provides individual attention.	Caregiver always provides individual attention to slow learners.

S.N.	Indicator	Scoring			
d.	Verbal behavior	Caregiver talks only when required with children during the day. Their voices are often harsh and irritable.	Caregiver does not shout or scold. Language lacks warmth.	Caregiver talks to children but controls interaction.	Caregiver talks as well as response to children during the day.
e.	Non-verbal behavior (smiling and physical contact)	Physical contact with children is used for punishment (hitting, slapping).	Physical contact is used for care routine-such as to help children in washing, eating etc.	Physical contact through accepted norms such as hugging, patting and holding is used for expressing affection for few children.	Physical contact is used for expressing affection and encouragement. Adults often smile at children.
7.	Physical-motor activities				
a.	Gross-motor activities	No indoor, outdoor space or equipment available to enhance gross motor activities such as crawling, climbing throwing, catching, jumping, running, playing with football.	Caregiver devotes less than 15 minutes a day to organize activities for gross motor development.	Caregiver devotes up to 30 minutes a day to organize activities for gross motor development.	Caregiver devotes up to 30 minutes a day to organize activities for gross motor development and children are encouraged to create own activities.
b.	Variety of gross motor activities <ul style="list-style-type: none"> • Climbing • Throwing • Catching • Jumping • Running • Physical exercise 	None of the mentioned.	1-2 of the mentioned.	3-4 of the mentioned.	5-6 of the mentioned.

S.N.	Indicator	Scoring			
c.	Variety of fine motor activities (emphasis on pre-writing skills) <ul style="list-style-type: none"> • Sand /water play • Block building • Allowing children to scribble • Finger painting • Threading beads • Sorting • Pasting • Coloring • Cutting with scissors 	1-2 of the mentioned.	3-4 of the mentioned.	5-6 of the mentioned.	All of the mentioned.
8.	Use of music and movement				
a.	Planned music and movement time provided	Once a week	Twice a week	Thrice a week	Everyday
b.	How often variety of instruments like tabala, madal, harmonium, tape recorder, flute etc. given to children to play	No instrument available.	Only one instrument available.	Two to more instrument available but played by the caregiver only.	More than two instruments available and children are also given an opportunity to play the instrument.
9.	Language activities				
a.	Expressive language <ul style="list-style-type: none"> • Expanding on children's comments 	None of the mentioned.	1-2 of the mentioned.	3-4 of the mentioned.	All of the mentioned.

S.N.	Indicator	Scoring			
	<ul style="list-style-type: none"> • Questions and answers • Allowing opportunity to talk • Pretended play • Dramatic play 				
b.	Enhancing comprehension <ul style="list-style-type: none"> • Story telling • Introduction to alphabets, numbers, signs and symbols • Songs • Rhymes • Conversation • Question and answers • Reading from book (recognition-sight learning) • Words on flannel board, cards (where children get familiar with the written script) • Creative experience-songs, music, movement 	None of the mentioned.	1-3 of the mentioned.	4-6 of the mentioned.	7-9 of the mentioned.
10.	Cognitive activities				
a.	Variety of cognitive activities <ul style="list-style-type: none"> • Naming / recognition / 	None of the mentioned.	1-2 of the mentioned.	3-4 of the mentioned.	All of the mentioned.

S.N.	Indicator	Scoring			
	identification of colors, animals, birds, vegetables, and fruits, daily use items <ul style="list-style-type: none"> • Sorting • Matching • Serration • Pre-arithmetic concepts (counting, under-above, up-down, outside-inside, more-less, big-small, one-many etc.) 				
b.	Planning of cognitive activities	Caregiver provides opportunities for developing cognitive abilities.	Caregiver provides one opportunity in 2 days for developing a cognitive ability.	Caregiver provides one opportunity in a day for developing a cognitive ability.	Caregiver provides many opportunities to develop cognitive abilities.
11.	Development of social skills.				
a.	Arrival and departure	The caregiver ignores/does not greet children when they arrive/leave.	Caregiver greets and bides goodbye to some children at her convenience.	Caregiver greets and bides goodbye to most children warmly.	Time is set aside for greeting and bidding good-bye to children.
b.	Social interaction among children	Entire day schedule is so planned that there is no/little opportunity for children to interact with each other.	Schedule of activities during day allows some social interaction during mealtime and free times.	Schedule of activities during the day provides considerable opportunity (group work, flexibility, freedom to explore) for social interaction among children during structured play, free play	Caregiver encourages and creates opportunity (projects, group activities) for social interaction by children.

S.N.	Indicator	Scoring			
				and meal times.	
c.	Resolving conflicts among children	Caregiver is indifferent towards children's conflict.	When children fight, caregiver steps in to stop the conflict but do not explain them.	In children's fights, caregiver intervenes to resolve the conflict through explanation and discussion.	Caregiver actively teaches and helps the children to resolve the conflicts through discussion and dialogue.
12.	Provision for staff				
a.	Staff-staff interaction	Staff members are hostile towards each other.	The adults are indifferent to each other	The adults interact informally.	There is institutional mechanism for caregivers to interact on regular basis. E.g. meetings seminars workshops, group activities.
b.	Facilities for the staff <ul style="list-style-type: none"> • Refreshment facilities • Resting facilities • Time for planning and preparing materials • In-service inputs (training) 	None of the mentioned.	One of the mentioned.	Two of the mentioned.	3-4 of the mentioned.

APPENDIX D

DEVELOPMENTAL ASSESSMENT MEASURE FOR PRE-SCHOOL CHILDREN (DAM 1)

Date :

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	I.	PERFORMANCE			
	A.	MAKING THE SAME PATTERN			
2½-3	1.		Make the first two patterns one by one at a time. Tell the child.	Small pebbles are used to make the patterns.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given for each of the three parts, if the child approximates the patterns. • 1 is given if partially done. • 0 is given if the patterns differ significantly for example a curve instead of a line or a line instead of a triangle.
	2.		Same as above.	Do	Do
	3.	Clubbing all the stones together.	Clubbing all the stones together. Later ask the child to collect all.		Do
3-4	1.		While the child is watching make the patterns. Ask the child	Small pebbles.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child approximates the pattern.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
			to make the same pattern.		<ul style="list-style-type: none"> • 1 is given if partially done the pattern. • 0 is given if the child makes a curved crooked line.
	2.		Same as above.	Same as above.	A score of: <ul style="list-style-type: none"> • 2 is given if the child approximates the pattern (size can be big or small). • 1 is given if partially does the pattern • 0 is given if the child widely deviates from the pattern drawn. Say a circle, a square without a central stone or a triangle.
4-5	1.		While the child is watching, make this pattern. Ask the child.	Two big cardboard discs, each of the following colours- Red, blue and yellow. Size: 2.5 cm diameter.	A score of: <ul style="list-style-type: none"> • 2 are given if the child approximates the pattern. • 1 is given if partially done the pattern • 0 is given if the child makes a curved, crooked line.
	2.			Two big and two small cardboard discs. Size: - Big: 2.5 cm; Small: 1.5 cm in diameter.	A score of: <ul style="list-style-type: none"> • 2 are given if the child approximates the pattern. • 1 is given if partially does the pattern • 0 is given if the child is unable to copy the pattern.
	3.			Three big red and three big blue cardboard discs. Size: 2.5 cm in	A score of: <ul style="list-style-type: none"> • 2 are given if the child approximates the pattern.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
				diameter.	<ul style="list-style-type: none"> • 1 is given if partially done the pattern • 0 is given if the child is unable to copy the pattern.
	4.			Two big cardboard discs each of the following colours- red, blue and yellow.	A score of: <ul style="list-style-type: none"> • 2 are given if the child approximates the pattern. • 1 is given if partially done the pattern. • 0 is given if the child is unable to copy the pattern
	A.	FOLLOWING INSTRUCTIONS			
2½-3	1.	Tell the child-Go and touch the door.	The instructions are given slowly and one at a time. Tell the child.		A score of: <ul style="list-style-type: none"> • 2 marks are given for each of the five instructions if the child follows them correctly. • 1 is given if partially done the pattern. • Otherwise, 0 is given.
	2.	Give me that book.			Do
	3.	Keep the book on the table.			Do
	4.	Keep the book in the bag.			Do
	5.	Keep the book 'under' the table.			Do

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
3-4	1.	Pick up that stone and give me this book.	Tell the child. Give the instructions slowly and clearly. Both parts should be said together.	A stone and a book.	A score of : <ul style="list-style-type: none"> • 2 are given when the child gives the book as well as picks up the stone. • 1 is given if child give book only or pick up stone. • 0 is given if instruction is partly followed.
	2.	Pick up that button, then pick up that sheet and place it on that book.	Tell the child. Say the whole instruction slowly and clearly. All three parts should be said together.	A button, a sheet of paper, a book.	A score of: <ul style="list-style-type: none"> • 2 are given if the child follows the complete instruction sequence. • 1 is given if the child follows half of the instruction. • Otherwise 0 is given.
4-5	1.	Put the pencil (point) between us and then move it closer to you.	Give the instructions only once, slowly and clearly. Do not perform them yourself. Tell the child.	A pencil.	A score of : <ul style="list-style-type: none"> • 2 are given when the child places the pencil at the desired place and then moves it closer to him/her. • 1 is given when the instructions partly followed • 0 is given when the instructions are not followed.
5-6	1.	Hold your ears, blink your eyes, release your ears and then sit down.	Tell the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child is able to carry out the instructions correctly. • 1 is given if the child able to carry out half of the instruction • 0 is given if the child is unable to perform correctly.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Pretend to brush your teeth, and then knead the dough, make a chapatti and then eat it.	Tell the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child is able to carry out the instructions correctly. • 1 is given if the child able to carry out half of the instruction • 0 is given if the child is unable to perform correctly.
	B.	WHICH IS DIFFERENT (Visual Discrimination)			
3-4	1.	Three plates and a cup are drawn on a flash card and the child has to tell which one is different.	Show the flash card to the child and ask.	A flash card depicting drawings of three saucer plates and a cup.	A score of: <ul style="list-style-type: none"> • 2 is given if the child identifies the cup as being different • 1 is given if the child points to one of the plates • 0 is given if he/she points wrong object
	2.	Three big buttons and one small one.	Show the flash card on which 3 big buttons and one small button have been pasted and ask.	A flash card on which 3 relatively big sized and 1 small sized buttons have been pasted.	A score of: <ul style="list-style-type: none"> • 2 are given if the child points at the small button. • 1 is given if the child points both • 0 is given if confused and does not point
4-5	1.	Three squares and one diamond shape.	Show the following picture and ask the child.	Line drawings of three squares and one diamond shape on 6"x	A score of: <ul style="list-style-type: none"> • 2 are given if the child points to the shapes correctly.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
				8" sized sheets.	<ul style="list-style-type: none"> 1 is given if the child points to the squares or diamond shape only. 0 is given if the child points to the wrong shape.
	2.	Three long lines and one short line.	Show the following picture and ask the child.	Three long sticks and one short stick.	A score of: <ul style="list-style-type: none"> 2 are given if the child points to the right sticks. 1 is given if the child points to the only short or long sticks 0 is given if the child points to the wrong stick.
5-6	1.	Pictures of cow, dog, cat and bird.	Show the following picture and ask the child.	Pictures of cow, dog, cat, bird on a 6"x 8" sized sheet.	A score of: <ul style="list-style-type: none"> 2 are given if the child points to the right pictures. 1 is given if the child points to the partially right pictures. 0 is given if the child points to the wrong picture.
	2.	Three coloured and one uncoloured circle.	Show the following picture and ask the child.	Coloured drawings of three big circles and line drawing of one small circle on a 6"x 8" sized sheet.	A score of: <ul style="list-style-type: none"> 2 are given if the child points to the uncoloured circle. 0 is given if the child points to the coloured circle.
	C.	CLASSIFICATION (Matching)			0-1-2

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
2½-3	1.	Matching on the basis of two colours.	Place three pairs of different coloured discs (Red, green and blue) in front of the child and tell him/her. If the child does not follow, repeat the instructions again.	Cardboard discs on which coloured paper has been pasted (of the size of 0.50p coin).	<ul style="list-style-type: none"> • If the child is able to match after the first demonstration, a score of 2 is given. • If verbal cues and demonstration are given again and the child completes the task, a score of 1 is given. • Otherwise 0 is given.
	2.	Matching shapes-circles, triangles, square.	<p>Place a sheet of paper on which cut outs of a triangle, circle and square are pasted. Show the cardboard cut outs of the same in front of the child. Place the cutout of the triangle on the one pasted on paper and say.</p> <p>If the child is unable to follow or makes mistakes, repeat the demonstration.</p>	Paper with coloured paper cutouts of triangle, square, circle pasted on it. Same sized cardboard cut outs of the same colour and size.	<ul style="list-style-type: none"> • If the child is able to complete the task after first demonstration a score of 2 is given. • If the child succeeds in completing the task after the second demonstration a score of 1 is given • Otherwise no score is given.
3-4	1.	Arranging things into categories (flowers,	Place a set of 4 objects each in front of the	A set of 4 each-plastic/paper flowers,	<p>A score of:</p> <ul style="list-style-type: none"> • 2 is given if the child is able to group buttons and

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
		buttons, pebbles, stones).	child and say (pick up the flowers one by one).	medium sized buttons, pebbles, stones.	<p>stones on his/her own without any help, after demonstration</p> <ul style="list-style-type: none"> • 1 is given if the child is able to group buttons partially • 0 is given if the child is not able to group them.
	2.	Classifying on the basis of colours (red and blue).	Give the child a set of coloured discs (four each of yellow, red and blue colours and ask.	A set of four each-card board rounds, 2 cm in diameter in yellow, red and blue colour.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to group same coloured discs after demonstration. • 1 is given if the child is able • 0 is given if the child is not able to group them. to group partially
	3.	Tell which objects go together (mirror-comb, saucer-spoon, and notebook-pen).	Place saucer, notebook, mirror in one row and spoon, comb and pen in another row. Pick up the mirror and place it with the comb and say.	A comb, small mirror, a saucer and a spoon, a notebook and pen.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child pairs notebook and pen, saucer and spoon after demonstration. • 1 is given if the child pair partially • 0 is given if the child is unable to do so.
4-5	1.	On the basis of two shapes (square and circle).	Provide the child with cardboard cut outs of two red circles and two red squares. Ask the child.	Cardboard cut outs of two red circles (2.5 cm diameter) and two red squares (2.5 cm).	<p>A score of :</p> <ul style="list-style-type: none"> • 2 is given if the child is able to group the similar cut outs • 1 is given if the child is partially able to group similar cut outs... • 0 is given if the child is unable to group.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	On the basis of three sizes (big, medium and small).	Provide the child with three blue circles: big, medium and small. Ask the child.	Cardboard cutouts of three big blue (cm), medium blue (2 cm) and small blue (1.5 cm) circles.	A score of: <ul style="list-style-type: none"> • 2 are given if the child is able to group the similar cut outs. • 1 is given if the child is partially able to group similar cut outs • 0 is given if the child is unable to group.
5-6	1.	On the basis of colour and shape simultaneously.	Provide the child with cardboard cutouts of- one big red circle, one big red triangle, one small yellow circle and one small yellow triangle. Ask the child.	One big red circle (2.5 cm), one big red triangle (2.5 cm), one small yellow circle (1.5cm) and one small yellow triangle (1.5cm).	A score of: <ul style="list-style-type: none"> • 2 are given if the child is able to group the similar cutouts. • 1 is given if the child is partially able to group similar cut outs • 0 if the child is unable to group them.
	D.	NUMBER CONCEPT (One to one)			
2½-3	1.	Ask the child to put 3 stones, one in each of the three containers.	Tell the child, (placing the stones in a line before the child). Hand him/her over 3 stones and say. If the child does not follow then again repeat the instructions and put a stone in the first bowl and then ask the child.	Three bowls and three pebbles.	<ul style="list-style-type: none"> • If the child puts 3 pebbles in the 3 bowls after being given the instructions once a score of 2 is given. • If the child succeeds in the second attempt, after demonstration a score of 1 is given. • Otherwise 0 is given.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
3-4	1.	Gives one stone or three stones when asked.	Place five stones in front of the child and say.	Five stones.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child hands over one as well as three stones. • 1 is given if the child performs only first instructions. • Otherwise 0 is given.
4-5	1.	Gives 1-7 stones when asked.	Place 20 stones in front of the child and say.	20 stones.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to give 10 stones. • 1 is given if the child is able to give 4-5 stone only • 0 is given if the child is not able to do so.
	2.	Gives 7-20 stones when asked.	Place 20 stones in front of the child and say.	20 stones.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to pick out more than 10stones. • 1 is given if the child is able to give more than 5 stones. • 0 if the child is not able to give less than 4.
5-6	1.	Let the child count 3 stones, take away one and ask how many are left.	Place ten stones in front of the child and ask. Then remove one stone from it and ask.	Ten stones.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 is given if the child is able to count the stones correctly as well as able to tell the number of stones left after one stone is removed from the group of 3 stones. • 1 is given if the child is able to perform either of

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					the tasks mentioned above. <ul style="list-style-type: none"> 0 is given if the child is unable to perform either of the tasks.
	E.	VISUAL MEMORY			
3-4	1.	Tells the object which has been removed (soap, comb, spoon).	Place the three objects in front of the child. After the child has seen them, ask him/her to close his/her eyes. Remove any object and ask him/her the name of the missing object.	Soap, spoon, comb.	A score of: <ul style="list-style-type: none"> 2 are given if the child names the missing object correctly. 1 is given if the child names the missing object after repeatedly asked Otherwise 0 is given.
4-5	1.	Tells the object which has been removed.	Place the five objects in front of the child. After the child has seen this set for a minute, ask him/her to close his/her eyes. Remove one object (flower) and ask him/her to name the missing object.	Leaf, feather, stick, flower and stone.	A score of: <ul style="list-style-type: none"> 2 are given if the child is able to name the missing object (flower). 1 is given if the child is able to name after repeatedly asking 0 is given if the child is not able to give the correct response.
	2.	Points to the picture that has been inverted.	Show two sets of identical cards to the child. In set I, invert	Two identical sets of picture cards having pairs of line drawings of	A score of: <ul style="list-style-type: none"> 2 are given if the child is able to point to the

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
			the pair of triangles and let the child see the other pictures of the set. After 30 seconds, invert all the remaining pictures of the set I. Now ask the child to point to that picture in set II which was inverted in set I.	circle, triangle, square and star.	<p>inverted picture (triangle).</p> <ul style="list-style-type: none"> • 1 is given if the child is able to point after repeatedly asking • 0 is given if the child is unable to do so.
5-6	1.	Tells the object which has been removed (6 objects).	Place the six objects in front of the child. After the child has seen the set for a minute, ask him/her to close the eyes. Remove one object (pen) and ask the child to name the missing object.	Nail, lock, pen, paper, clip and key.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to name the missing object (pen). • 1 is given if the child is able to name after repeatedly asking • 0 is given if the child is not able to give the correct response.
	2.	Points to the picture that has been inverted.	Show two sets of identical cards to the child. In set I, invert one picture (circle) and let the child see the other pictures of this set. After 30 seconds	Two identical sets of picture cards on which line drawings of circle, triangle, square and star are drawn.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to point to the right picture (circle). • 1 is given if the child is able to response after repeatedly asking. • 0 is given for an incorrect response.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
			invert all the remaining pictures of Set I. Now ask the child to point to that picture in set II which was inverted in Set I.		
	F.	TEMPORAL RELATIONSHIP			
3-4	1.	Arranges the cards in the sequence of water being filled in the bucket.	Give the three cards to the child and say.	Three cardboard flash cards depicting three drawings of buckets with increasing levels of water.	A score of: <ul style="list-style-type: none"> • 2 is given if the child is able to arrange the cards correctly from least filled to most filled, • 1 is given if the child is able to arrange the card partially correct • Otherwise 0 is given.
4-5	1.	Arranges the cards in the sequence of banana being eaten.	Give the three flash cards to the child and say.	Three cardboard flash cards depicting three drawings of a full banana, a partially eaten banana and banana's skin.	A score of: <ul style="list-style-type: none"> • 2 are given if the child is able to arrange the cards correctly from the full banana to the banana's skin. • 1 is given if the child is able to arrange the picture cards partially correct from the full banana to the banana's skin • 0 is given if the child is not able to arrange the cards correctly.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Arranges the cards in the sequence of a melting candle.	Give the three flash cards to the child and say.	Three cardboard flash cards depicting three drawings of a candle with decreasing levels of height.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to arrange the candles according to the decreasing levels of height. • 1 is given if the child is able to arrange the candles partially correctly according to the decreasing levels of height • 0 is given if the child is not able to arrange the cards correctly.
5-6	1.	Arranges the picture cards in the sequence of a tree growing from a sapling.	Give the three picture cards to the child and ask.	Three cardboard picture cards depicting drawings in the sequence-a sapling, a shrub and a tree.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to arrange the picture cards in the correct sequence. • 1 is given if the child is able to arrange the picture cards in the partially correct sequence • 0 is given if the child is unable to do so.
	G.	AUDITORY MEMORY			
3-4	1.	Arranges any two objects in the same sequence as called out (soap, spoon and comb).	Call out any two objects (out of the three kept in front of the child). Ask the child to place them in front of you.	Soap, spoon, comb.	<ul style="list-style-type: none"> • A score of: • 2 are given if the child picks up two objects in the same sequence as called out. • 1 is given if the child picks up one objects in the same sequence as called out • 0 is given for an incorrect.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
4-5	1.	Places three objects in the same sequence as called out (key, lock and pen).	Place the three objects- key, lock and pen in front of the child. Ask the child to place the objects on a paper in the sequence called out.	Key, lock, pen	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to place the objects in the specified sequence. • 1 is given if the child is partially able to place the objects in a sequence • 0 is given if the child is not able to perform the sequential placement.
	2.	Places four objects in the same sequence as called out (bangle, key, stone and ring).	Place the four objects- bangle, key, stone and ring in front of the child. Ask the child to place the objects in the sequence called out.	Bangle, key, stone and ring.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to place the objects in the specified sequence. • 1 is given if the child is partially able to place the objects in a sequence. • 0 is given if the child is not able to carry out the sequential placement.
5-6	1.	Place five objects in the same sequence as called out (lock bangle, key, stone and ring).	Place the five objects- locks, bangle, key, stone and ring in front of the child. Ask the child to place the objects in the sequence called out.	Locks, bangle, key, stone and ring.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to place the objects in the specified sequence. • 1 is given if the child is partially able to place the objects in the specified sequence • 0 is given if the child is not able to carry out the sequential placement.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	H.	COPYING PATTERN			
2½-3	1.		<p>Place a paper and a sketch pen in front of the child and draw a horizontal line and say.</p> <p>Then draw a vertical line and give the same instructions.</p>	Paper, sketch pen (coloured).	<ul style="list-style-type: none"> • If the child is able to approximate both the lines, 2 marks are given for each of the two parts. The item is marked correct even if the lines are marginally transverse. • If the try to make according to instruction 1 mark is given • However, no marks are given if the child draws a vertical line for a horizontal one and vice versa. If the child draws a curvilinear line then also no score is given.
	I.	PART-WHOLE			
2½-3	1.	Points to missing part (one eye and hair) of the face.	<p>Show the cardboard cutout of a face to the child that has eyes, nose, mouth and hair and say. Showing the child a second cardboard which has eyes missing and removing the first cutout away from him/her.</p>	Round cardboard cutouts-one which has complete face and the other in which the eyes are missing.	<ul style="list-style-type: none"> • If the child says eyes and othother missing part a score of 2 is given • If child is able to say only one missing part a score 1 is given • , otherwise no score is given.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Joins two parts of a cutout to make a whole picture (banana, toffee, and flower).	Place the two cutouts of toffee in front of the child and tell him/her, (giving the child cutouts of a banana). Next give the child cutouts of the flower. If the child is unable to understand what has to be done, repeat the demonstration again.	Cardboard cutouts of a toffee, banana, flower.	<ul style="list-style-type: none"> • If the child is able to join the cutouts of flower and banana after the first demonstration, a score of 2 is given. • If the child is able to complete the task after the second demonstration and with verbal cues a score of 1 is given. • Otherwise 0 is given.
3-4	1.	Puts together 2 parts to make a whole (banana, tree, face)	Show the cutouts of the face to the child and tell him/her. Then give cutouts of tree and banana one by one and ask him/her to do the same.	All the cutouts are made in cardboard.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child is able to complete the task. • 1 is given if the child is partially able to complete the task • Otherwise 0 is given.
	II.	VERBAL			
	A.	INFORMATION			
2½-3	1.	Tells first/nick name when requested.	Ask the child.	-	<p>A score of:</p> <ul style="list-style-type: none"> • 1 is given if the child tells his/her first/nick name. • 0, if the child fails to do so.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Labels common objects (mirror, soap, toffee).	Show each of the objects one by one to the child and ask.	A soap cake, a mirror and a toffee (fresh).	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child labels all the objects. Child can also answer in his/her native language for which clarification can be sought from the mother/family members. • 1 mark is given if the child gives correct label for any 1-2 objects. • 0 is given if the child does not answer correctly at all. <p>Score is also given for acceptable responses or any other equivalent label in any other language.</p>
	3.	Labels four common pictures (chair, spoon, ball, and comb).	Show each of the picture cards one by one to the child and ask.	Flash cards depicting pictures of chair, spoon, ball, comb.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child labels 3-4 pictures correctly. • 1 is given if the child labels any 1-2 picture cards correctly. • 0 is given if the child does not label any picture or gives incorrect labels to all objects. <p>Score is also given for acceptable response or any other word equivalent in any other language.</p>
	4.	Uses irregular past tense.	Ask the child Qs about his/her immediate past. For example, Qs can		<p>If the child uses irregular past tense, the child gets a score of 2 and</p> <p>For partially irregular past tense 1 score is given,</p>

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
			also be asked about food, his friends etc.		otherwise a score of 0 is given.
	5.	Uses “no” in speech.	Ask such Qs to which the child is more likely to answer in negation.		If the child uses “no”, a score of 2 is given. 1 is given if the child hesitate If the child do not use “no “a score of 0 is given.
	6.	Uses ‘is’ in statements.	While showing action picture cards, note if the child uses “is” in statements.	Action picture cards	If the child uses “is” in his speech, a score of 2 is given, And 1 is given when hesitate to answer, a score of 0 is given when do not use the statement.
	7.	Points to five body parts (eyes, nose, ears, hands, feet).	Ask the child one by one where his eyes, nose, ears, hands and feet are.		A score of: <ul style="list-style-type: none"> • 2 are given for any 4-5 correct responses. • 1 is given if the child points to any 2-3 body parts correctly. • 0 is given if the child gives only one correct response or fails to point to any body part.
3-4	1.	Tells first/full name when requested.	Ask the child.		A score of: 2 are given if the child tells his/her first/full name. 1 is given if partially tells Otherwise a score of 0 is given.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Tells whether the following animals live in the jungle or near their home (lion, cat, elephant, bear, crocodile, cow, and parrot).	Show each of the following picture cards one by one and ask.	Flash cards depicting the pictures of lion, cat, elephant, bear, crocodile, cow and parrot.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child gives correct answers for 5-7 animals. • 1 is given if the child gives correct response for 3-4 animals. • 0 is given if the child answers for 2 or less animals. <p>Score is also given for any acceptable responses.</p>
	3.	Tells names of children with whom he/she plays/studies.	Ask the child.		<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child mentions 3-4 names. • 1 is given if 1-2 names are given. • 0 is given for no response.
	4.	Tells how common objects are used (mirror, comb, soap and spoon).	Show each of the objects one by one and ask.	Soap, a mirror, a comb and a spoon.	<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child answers correctly for 3-4 objects. • 1 is given for 1-2 correct responses. • 0 is given if the child does not give use of any object. <p>Score is also given for any acceptable responses.</p>
	5.	What are the ingredients for cooking dal?	Ask the child.		<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child mentions ingredients or

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					any other spices. <ul style="list-style-type: none"> • 1 is given if the child only says dal and water. • 0 is given if the child says or does not respond.
	6.	Tells where does the bus move?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child gives correct answer. • 1 is given when the child try to response • 0 is given if the child does not mention, or does not respond.
	7.	Points to 10 body parts (eyes, nose, ears, lips, cheeks, teeth, hand, feet, fingers and toes).	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given for 7-10 correct responses. • 1 is given for 4-6 correct responses. • 0 is given if the child answers 3 or less correctly.
4-5	1.	Tells mother's or father's name.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child tells his/her mother's/father's name • 1 is given if the child tells incomplete name of parents. • 0 is given if the child does not give the correct response.
	2.	Tells what lives in water.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child names any two water creature.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> • 1 is given if the child names any one water creature. • 0 is given if the child does not give the correct response.
	3.	Tells what ears and mouth are for.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says they are used for hearing and eating • 1 is given if the child says one correct response. • 0 is given if the child gives an incorrect response.
	4.	Tells how many legs a horse, dog, cow and cat have.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says four legs for 3 animals • 1 is given if the child says one correct response. • 0 is given for an incorrect response.
	5.	Tells what wheels in a car/bus/cycle are for.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says they help to move • 1 score is given for partially correct response • 0 is given if the child gives an incorrect response.
	6.	Name two round things.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child names two round things. • 1 is given if the child gives one name. • 0 is given if he/she is unable to do so.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	7.	Tells where the train moves.	Ask the child.	In Kathmandu there is no train so children were asked about bus, and car.	A score of: <ul style="list-style-type: none"> • 2 are given if the child says on the railway track. • 1 is given if the child gives partially correct response • 0 is given if gives incorrect response.
	8.	Tells what houses are for.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child is able to give the functions of the house i.e., for shelter, eating, living, etc. • 1 is given if the child gives partially correct response. • 0 is given if the child is unable to do so.
5-6	1.	Tells what work her/his father does.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child tells what work his/her father does correctly • 1 is given if the child partially tells about his/her father's work. • 0 is given if the child does not give the correct response.
	2.	Tells his/her age.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child tells his/her age correctly. • 1 is given to partially correct response

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> 0 is given if the child does not give the correct response.
	3.	Tells the name of the city/state/town in which he/she stays.	Ask the child.		A score of: <ul style="list-style-type: none"> 1 is given if the child gives the correct name of the city/state/town/country in which he/she stays. 0 is given if the child does not give the correct response.
	4.	Tells what is necessary for growing plants.	Ask the child.		A score of: <ul style="list-style-type: none"> 2 are given if the child says water/seed/fertilizer/soil/air. 1 is given if the child says any two things. 0 is given if the child does not give the correct response.
	5.	Tells why her /his father works does.	Ask the child.		A score of: <ul style="list-style-type: none"> 2 is given if the child replies “to earn money so as to buy things” 1 is given for partially correct answer 0 is given if the child does not give the correct response.
	6.	Names four birds.	Ask the child.		A score of: <ul style="list-style-type: none"> 2 is given if the child gives names of any four birds

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> • 1 is given if the child gives names of any two birds. • 0 is given if the child does not give the correct response.
	7.	Recognizes the given coins.	Ask the child.	The following coins should be shown to the child: 50p, Re 1, Rs 2 and Rs 5.	A score of: <ul style="list-style-type: none"> • 2 are given if the child is able to recognize all the coins. • 1 is given if the child is able to recognize only two the coins. • 0 is given if the child does not give the correct response.
	8.	What is flour made of?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says “wheat and corn” • 1 is given if the child says only one “wheat or corn “ • 0 is given if the child does not give the correct response.
	A.	VERBAL PROBLEM SOLVING			
3-4	1.	What do you do when you feel cold?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given for acceptable response • 1 is given for a partially acceptable response

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> 0 is given for incorrect response Score is also given for any acceptable response.
	2.	What do you do when you are hungry?	Ask the child.		A score of: <ul style="list-style-type: none"> 2 are given if the child names any 2-4 eatable items. 1 is given if the child names any one eatable items 0 for incorrect response.
	3.	What do you do if you hurt your hand/finger/foot?	Ask the child.		A score of : <ul style="list-style-type: none"> 2 are given for acceptable response. 1 is given for partially acceptable response If the child says “nothing”, seek clarification.
	4.	What must be done to boil water?	Ask the child.		A score of: <ul style="list-style-type: none"> 2 are given for acceptable response. 1 is given for partially acceptable response. 0 is given for incorrect response.
4-5	1.	What would you do if while playing with your friends your ball goes into the bushes	Ask the child.		A score of: <ul style="list-style-type: none"> 2 is given if the child answers-take the ball out. 1 is given if the child tries to response correctly. 0 is given if he/she gives some other response.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	What would you do if a cat enters the kitchen in your presence?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says he/she will push the cat out • 1 is given if the child tries to response correctly. • 0 is given for an incorrect response.
	3.	If you go to a shop to buy salt and it is not available there, then what would you do?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child replies that he/she would get it from the market. • 1 is given if the child's answer is partially correct • 0 is given for an incorrect response.
5-6	1.	If somebody's house catches fire what would you do?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says that he/she will try to put out the fire with water/sand. • 1 is given if the child is unable to give the partially correct answer • 0 is given if the child is unable to give the correct answer.
	2.	If a boy/girl is your brother/sister what are you to him/her?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child give correct answer • 1 is given if the child gives partially correct answer. • 0 is given if the child is not able to give the correct answer.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	B.	ARITHMETIC REASONING			
2½-3	1.	Points to long and short objects.	Ask the child pointing towards a long and a short stick placed before him/her.	Two sticks one of which is notably longer than the other.	If the child points correctly a score of 2 is given, 1 is given for partially correct answer and 0 is given for incorrect answer
	2.	Tells if the object is light or heavy.	Give the child a small pebble in one hand and a big stone in the other and ask.	Two stones-one pebble and the other bigger and heavier in size and weight.	If the child points to the heavier stone, a score of 2 is given. 1 is given for if the child give one correct answer Otherwise the item is marked 0.
	3.	Hands over one or more objects when asked.	Place a few stones and a few sticks in front of the child in separate heaps. Pointing towards the stones say. Keep the stones away. Ask the child.	A few pebbles 5-6 in number and same number of sticks.	A score of: <ul style="list-style-type: none"> • 2 are given only when the child responds to both requests correctly, i.e., hands over only one stone and more than one stick. • 1 is given when the child response partially. • 0 is given for incorrect response
3-4	1.	Tells if the object is light or heavy (cotton and stone of same size).	Give the child a stone in one hand and cotton in the other and ask	A stone and some cotton of same size.	A score of: <ul style="list-style-type: none"> • 2 are given if the child says stone. • 1 is given for partially correct response. • 0 is given if the child says cotton.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Points to long and short objects.	Place two sticks, one long and the other short in front of the child and ask.	Two sticks one 10” long and the other 5” long.	A score of: <ul style="list-style-type: none"> • 2 are given if the child points to the long stick. • 1 is given if the child answers slowly but correctly after checking. • 0 is given if the child points to the short stick.
4-5	1.	Can you buy more things with Re 1 or with Rs 10/-	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says that with Rs 10/- he/she can buy more things • . 1 is given for partially correct response about buying capacity of money • 0 is given if the child says Re 1.
	2.	If I cut an apple into half, how many pieces would be there.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says two. • 1 is given for partially correct response • 0 is given if the child gives incorrect response.
5-6	1.	If you have two rotis and I give you one more, how many will you have?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says three rotis. • 1 is given for partially correct response • 0 is given if the child is not able to give the correct answer.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Can more things be bought with 50p or Rs 2?	Ask the child.		<p>A score of:</p> <ul style="list-style-type: none"> • 2 is given if the child says Rs 2/- • 1 is given for partially correct response. • 0 is given if the child is not able to give the correct answer.
	3.	If you have six bananas and you give me four of them how many bananas would you have then?	Ask the child.		<p>A score of:</p> <ul style="list-style-type: none"> • 2 are given if the child says two bananas. • 1 is given for partially correct response. • 0 is given if the child is not able to give the correct answer.
	4.	If one apple costs Re 1, how much would two apples cost?	Ask the child.		<p>A score of:</p> <ul style="list-style-type: none"> • 2 is given if the child says Rs 2/- • 1 is given for partially correct response. • 0 is given if the child is not able to give the correct answer.
	5.	If one balloon costs Re 1, how much would two costs?	Ask the child.		<p>A score of:</p> <ul style="list-style-type: none"> • 2 is given if the child says Rs 2 • 1 is given for partially correct response. • 0 is given if the child is not able to give the correct answer.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	C.	ANALOGIES			
2½-3	1.	This is a boy and this is a -----.	Show the picture card of a boy and a girl to the child and ask.	Picture cards of a boy and a girl.	<ul style="list-style-type: none"> • If the child says “girl” or any other equivalent to the female child, a score of 2 is given. • 1 is given for partially correct response. • A score of 0 is given if the child gives a wrong response or fails to answer correctly.
	2.	This container is big and this is -----.	Place the two containers in front of the child and say.	Two containers, one bigger in size than the other.	A score of 2 is given if the child says “small” and for a similar meaning word in any other language a score of 1 is given, otherwise 0 is given.
	3.	The door is open and now it is -----.	Point towards the open door and say. Next, close the door and ask.		A score of 2 is given if the child says “closed” and 1 is for any other similar meaning word. Otherwise 0 is given.
3-4	1.	This is a boy and this is a -----.	Show picture card of a boy and then that of a girl and say	Picture cards (5”x 2.5”) depicting illustration of a boy and a girl.	A score of: <ul style="list-style-type: none"> • 2 are given if the child gives acceptable response, girl or any equivalent word. • 1 is given for partially correct response • 0 is given for an incorrect response.
	2.	An elephant is big and a mouse is -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given for acceptable response (small).

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> • 1 is given for partially correct response • 0 is given for an incorrect response.
	3.	We sleep at night and wake up in the -----	Ask the child.		A score of: <ul style="list-style-type: none"> • 1 is given if the child says “morning”. • 0 for incorrect response.
4-5	1.	A bird lives in the nest and we live in -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 1 is given if the child replies “house”. • 0 is given for an incorrect response.
	2.	Hair is black and teeth are -----.	Ask the child.		A score of : <ul style="list-style-type: none"> • 2 are given if the child replies that teeth are white. • 1 is given for partially correct response • 0 is given for an incorrect response.
	3.	A train moves fast and a cycle moves -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says that the cycle moves slowly • 1 is given for partially correct response • 0 is given if the child gives an incorrect response.
	4.	Salt is savory and sugar is -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “sweet”.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> • 1 is given for partially correct response • 0 is given if the child gives incorrect response.
	5.	Brother is a boy and sister is a -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “girl”. • 1 is given for partially correct response • 0 is given if the child gives incorrect response.
	6.	Flowers smell good and drain -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “stinks (smells bad)”. • 1 is given for partially correct response. • 0 is given if the child gives incorrect response.
5-6	1.	Ice is cold and fire is -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “hot”. • 1 is given for partially correct response. • 0 is given if the child gives incorrect response.
	2.	A tailor stitches clothes and a cobbler mends -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “shoes”. • 1 is given for partially correct response. • 0 is given if the child gives incorrect response.
	3.	Iron is heavy and cotton is	Ask the child.		A score of:

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
		-----.			<ul style="list-style-type: none"> • 1 is given if the child says “light”. • 0 is given if the child gives incorrect response.
	4.	During the day there is light, at night it is -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “dark”. • 1 is given for partially correct response. • 0 is given if the child gives incorrect response.
	5.	In water we swim, in the air we -----.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “fly”. • 1 is given for partially correct response. • 0 is given if the child gives incorrect response.
	D.	ACTION AGENT			
2½-3	1.	Tells who cooks at home.	Ask the child.		A score of: <p>2 are given if the child gives the name of any family member or servant who cooks at home.</p> <ul style="list-style-type: none"> • 1 is given for partially correct response • Otherwise 0 is given.
	2.	Tells who buys toys and sweets for him/her.	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child gives the name of any family member or acquaintance or family friend who buys things for him/her.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> • 1 is given for partially correct response • Otherwise 0 is given.
3-4	1.	What barks?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “dog”. • 1 is given for partially correct response • 0 if response is anything else.
	2.	What flies?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child names a bird. • 1 is given for partially correct response • 0 is given for any other response.
	3.	What swims?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “fish”. • 1 is given for partially correct response • 0 is given if the response is of an animal that does not swim.
4-5	1.	What pours?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says “rain water” • 1 is given for partially correct response • 0 is given if the child gives incorrect response.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	What writes?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “pen/ pencil/chalk/crayon”. • 1 is given for partially correct response • 0 is given for an incorrect response.
	3.	What grows?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “plant/tree”. • 1 is given if the child gives partially correct response • 0 is given if the child gives incorrect response.
5-6	1.	What blooms?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “flowers/ vegetables”. • 1 is given if the child gives partially correct response. • 0 is given if the child gives incorrect response.
	2.	What thunders?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says “storm/ wind ” • . 1 is given if the child says similar words or tries to explain. • .0 is given if the child gives incorrect response.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	E.	ACTION PICTURES (Tells actions depicted in the action picture cards)			
2½-3	1.	A woman sweeping the floor.	Show the action picture card to the child and ask.	Action picture card depicting a woman sweeping the floor.	If the child specifies the action correctly or expresses any other expression to indicate the same meaning a score of: <ul style="list-style-type: none"> • 2 are given. • 1 is given for partially correct answer. • 0 is given. for incorrect answer
	2.	A cat licking milk from the bowl.	Show the action picture card to the child and ask.	Action picture card depicting a cat licking milk from the bowl.	If the child specifies the action correctly or says something which expresses the action of licking/drinking, a score of: <ul style="list-style-type: none"> • 2is given and • 1 is given for partially correct response, • 0 is given for incorrect response
	3.	A child taking bath with the help of his mother.	Show the action picture card to the child and ask.	Action picture card depicting a child taking bath.	A score of: <ul style="list-style-type: none"> • 2 are given if the child tells the action. • 1 is given if the child gives partially correct response. • 0 is given if the child does not give correct response.


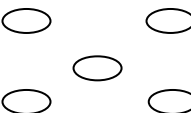


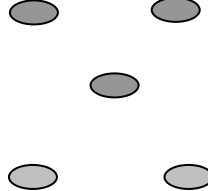
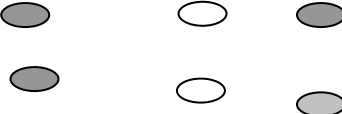
Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	F.	STORY RECALL SEQUENCE			
		<p>Once there was a deer. His name was Heera. He lived in a jungle near Chitwan. Nearby that jungle there was a lot of dust and sand. One day a storm blew in the jungle. Because of the storm some sand blew in the eyes of Heera so he immediately shut them. He thought, “Everyday sand gets into my eyes what should I do about it”. Then he decided to buy a pair of sunglasses.</p>	<p>Narrate the story slowly and clearly to the child and then ask the following questions.</p>		
3-4	1.	What went into the deer’s eyes?	Ask the child.		<p>A score of:</p> <ul style="list-style-type: none"> • 2 is given if the child says “dust or sand” • 1 is given if the child says partially correct answer • 0 if the answer is incorrect.

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
	2.	Why did sand get into the deer's eyes?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child responds • . 1 is given if the child partially responds • 0 is given for an incorrect answer.
	3.	Why did the deer shut his eyes?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the response is correct • 1 is given if the response is partially correct. • 0 for an incorrect answer.
4-5	1.	Why did the deer buy glasses?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says "because sand went into his eyes" or gives appropriate explanation. • 1 is given for partially correct explanation • 0 is given for an incorrect response.
	2.	What do you find near by the jungle of Chitwan?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says "dust/sand". • 1 is given for partially correct answer • 0 is given for an incorrect response.
	3.	What blew in the storm?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says "dust or sand" (Dhulo, Mato or Baluwa).

Age group (yrs)	S. No	Items	Instructions	Material	Desirable Response and Scoring (0-1-2)
					<ul style="list-style-type: none"> • 1 is given for partially correct answer. • 0 is given for an incorrect response.
5-6	1.	Where did the deer live?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 are given if the child says “jungle”. • 1 is given if the child says other related name, like “Ban “ • 0 is given if the child gives an incorrect response.
	2.	What was the name of the deer?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says immediately correct name “Heera” • 1 is given for a correct response after few minutes • 0 is given for an incorrect response.
	3.	Where will Heera buy his glasses from?	Ask the child.		A score of: <ul style="list-style-type: none"> • 2 is given if the child says “market/shop” • . 1 is given for an partially incorrect response • 0 is given for an incorrect response.

APPENDIX D1

DEVELOPMENT ASSESSMENT MEASURE I (NEPALI)

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
		Performance	(0-1-2)	
	A.	Making The Same Pattern टीचरले जस्तो बनाएको छ त्यस्तै बनाउ		
3-4	1			
	2			
4-5	3			
	4			
				
	6			
3-4	B	FOLLOWING INSTRUCTIONS		
	1	Pick up the stone and give me this book. त्यो ढुंगा उठाउ र किताब मलाई देउ		
	2	Pick up that button, then pick up that sheet and place both on the notebook. त्यो टाँख उठाउ, त्यो कागज उठाउ र दुवैलाई त्यो कापी माथि राख		
	3	Put up the pencil between us and then move in the closer to yourself यो शिशाकलमलाई हामी दुई जानको बीचमा राख अनि फेरी आफूतिर लैजाउ		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
	4	Hold your ears, blink your eyes, release your ears and sit down कान समात, आँख भिम्क्याउ, कान छोड़ र वस		
	5	pretend to brush your teeth, then knead the dough, make a chapatti and eat it दांत माझे जस्तो गर		
3-4	B	WHICH IS DIFFRENT		
	1	Three plates and one cup यसलाई हेर, यो केहो, कुन चाँही फरक छ (तीन वटा प्लेट र एउटा कप)		
	2	There big bottons and one small botton यो हेर के हो? यसमा कुन फरक छ (3 वटा ठुलो टाँख र एउटा सानो टाँख)		
4-5	3	Three squares and one diamand shape यो हेर के हो? यसमा कुन फरक छ (3 वटा चारपाटे र एउटा इटा आकार)		
	4	Three long lines and one short line यो हेर के हो? यसमा कुनचाहीं फरक छ (3 वटा ठुलो रेखा र एउटा सानो रेखा)		
5-6	5	Pictures of Cow, dog, cat and bird यो हेर के हो? यसमा कुनचाहीं फरक छ ? (गाई, कुकूर, विरालो, सुगा)		
	6	Three coloured and one uncoloured circle यो के हो? यसमा कुनचाहीं फरक छ (तीन रंगीन गोलाकार र एक सादा गोलाकार)		
3-4	D	CLASSIFICATION		
	1	Arranges things into categories (flowers, buttons, shoes) (फूल टाँख र जूता वेग्ला वैग्लै छुट्टाएर राख)		
	3	Tells which objects go together (bowlspoon, note book –pen, mirror- comb) यो ऐना हो। यो काइयो हो। हामी ऐना हेरेर कपाल कोछौं। यी दुईको प्रयोग संग सगै		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
		गछौ त्यसैल यिनीहरु दिदी बहिनी हुन । अरु पनि चिजहरुमा कुन कुन संगसगै प्रयोग गरिन्छ र दिदी बहिनी दाजुभाई हुन ।		
4-5	4	On the basis of two shapes (Square and circle) जुन उस्तै उस्तै छन जम्मा गर । (चारपाटे र गोलौं)		
	5	On the basis of there sizes (Big, medium and small) उत्रै, उत्रै चिजहरु एकै ठाउँमा राख । (ठूलो, ठिक्कको र सानो)		
5-6	6	On the basis of colour and shape simultaneously उस्तै उस्तै रंगका आकारका चिजहरु जम्मा गर ।		
	E	NUMBER CONCEPT		
3-4	1	Give one stone three stones when asked मलाई एउटा ढुंगा देउ, मलाई तीन वटा ढुंगा देउ ।		
	2	1-7 stones यसवाट मेरो हातमा 7 वटा ढुंगा राख ।		
	3	7-20 stones यसवाट मेरो हातमा 20 वटा ढुंगा राख ।		
5-6	4	Let the child count 3 stones take away one ask howmany are left यहा 3 वटा ढुंगा राख र एउटा झिक कति ढुंगा बाँकी छ?		
	F	VISUAL MEMORY		
3-4	1	Tells the objects which has been removed (soap, cumb, spoon) (साबुन, काइयौ, चम्चा)		
4-5	2	Tells the object which has been removed (5 objects) (Leaf, feather, stick, flower and stone) यहाँ राखिएका सामान हरू मध्य के के छैन? (पात, प्याँख, छेस्को, फूल, ढुङ्गा मध्य)		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
5-6	3	Tells the object which has been removed (6 objects) (nail, lock, pen, paper, clip and key) यहाँ भएका सामान मध्य के कै छैन? (किल्ला, ताल्या, कलम, कागज, क्लिप, र साँचो)		
	G	TEMPORAL AND RELATIONSHIP		
3-4	1	Arranges the cards in the sequence of water feeling in the bucket वाल्टी पानी भर्दाको कम मिलाएर काई राख (चित्र भएको काडै)		
	2	Arranges the cards in the sequence of banana being eaten Arranges the card in the sequence of water feeling in the bucket केरा खाइरहेको कम मिलाएर राखा चित्र भएका कार्डहरू।		
	3	Arranges the cards in the sequence of melting candies मैन बत्ति वलेर परलेको कम मिलाएर राख (चित्र भएको कार्ड)		
	4	Arrange the picture cards in the sequence of the tree growing from a sapling रुख विरुवा बढ्दै गएको क्रम मिलाएर राख (चित्र भएका कार्डहरू)		
		AUDITORY MEMORY		
3-4	1	Arranges any 2 objects in the same sequence as called out (soap, spoon and comb) मैले भने जस्तै गरी कुनै 2 वस्तुहरूलाई क्रम मिलाकर राख (साबुन, चम्चा, काइयो)		
	2	Place 3 objects in the same sequence as called out (Key, lock and pen) मैले भने जस्तै, गरी कुनै 3 वस्तुहरूलाई क्रम मिलाएर राख (साँचो, ताल्या कलम)		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
	G	TEMPORAL AND RELATIONSHIP		
3-4	1	Arranges the cards in the sequence of water feeling in the bucket वाल्टी, पानी भर्दाको क्रम मिलाएर कार्ड राख (चित्र भएको कार्ड)		
	2	Arranges the cards in the sequence of banana being eaten (केरा खाइरहेको क्रम मिलाकर राखचित्र भएका कार्डहरु)		
	5	What does the bus move? बस यहाँ गुड्छ?		
	6	Points to 10 body parts (Eyes, nose, ears, lips, cheeks, teeth, hand, feet, fingers and toes) तिमी्रो कान, आँखा, नाक, ओठ, गाला, दाँत, खुट्टा, हात, औला, खुट्टाकी औला देखाउ ।		
4-5	7	What is your mother's/father's name? तिमी्रो आमा/बुवाको नाम के हो?		
	8	What lives in water? पानीमा के के बस्छ?		
	9	What are ears for? कान के को लागि हो?		
	10	How many legs does a horse/dog have? घोडा/कुकुरको कतिवटा खुट्टा हुन्छ?		
	11	What are wheels for in a car/bus/cycle? कार/बस/साइकलको पांग्राको के काम हुन्छ?		
	12	Name two round things दुई वटा गोलो आकारको वस्तुको नाम भन (जस्तै चुरा)		
	13	What are houses for घर के को लागि हो?		
5-6	14	What work does your father do? तिमी्रो बुवा के काम गर्नु हुन्छ?		
	15	How old are you? तिमी कति वर्षको भयौ?		
	3	Places four objects in the same sequence as called out (bangle, key, stone and ring)		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
		हेर यहाँ सामानहरू छन अब मे जे भन्छु त्यो 4 वस्तुहरू क्रम मिलाएर राख (चुरा, सांचो, ढुङ्गा औठी)		
5-6	4	Place five objects in the same sequences as called out (lock, bangla, key, stone and ring) हेर यहाँ केही सामान छन मैले भने अनुसार पेच वस्तु क्रम मिलाकर राख (ताल्पा, चुरा, सांचो, ढुङ्गा, औठी)		
		VERBAL		
	A	INFORMATION		
3-4	1	Which if these animals live near your house, (lion, cat, elephant, bear, corocodile, cow, dog, parrot) कुन कुन जनावर तिम्रो घर नजिकै वस्छ (सिंहए विरालो, हात्ती, भालू, गोही, गाई, कुकुर, सुगा)		
	2	Tells names of children with whom he plays/studeis तिमी संग कुन कुन बच्चाहरू सगै खेलछन/पढछन नाम भन ।		
	3	Tells How common objects are used (mirror, comb, soap and spoon) कुन कुन वस्तुहरू के को लागि प्रयोग हुन्छ? (हेन काइयो, साबुन, चम्चा)		
	4	What are the Ingredients Used for cooking Dal? तिमी आमा (मम्मी) ले दाल पकाउन हुन्छ त्यो दालमा के के हालेको हुन्छ ।		
	16	What is necessary for growing plants? रुख विरुवा बढ्न, हुकैन के के चाहिन्छ:		
	17	Why does your father work? तिमी बुवा काम नि गर्नु हुन्छ?		
4-5	18	Name three birds तिनवटा चराहरूको नम भन?		
	19	Recognition of the given coins-50p, Rel, Rs.2, and Rs.5 यो कति पैसा हो? (पैसा, रु1, रु2, रु 5)		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
	B	VERBAL PROBLEM SOLVING		
34	1	What do you do when you feel cold? तिमीलाई जाडो भयो भने के गर्छौ?		
	2	What do you do when you are hungry? तिमीलाई भोक लाग्यो भने के गर्छौ?		
	3	What do you do if you hurt your hand/fingers/foot? तिमीलाई हात/खुट्टा/ओलामा घाउ लाग्यो भने के गर्छौ?		
	4	What would you do if while playing with your friends your ball goes into the bushes drain/other field? साथीहरूसँग खेल्दा खेल्दै तिमीहरूको बल (भकुन्डो) झडीमा/ढलमा/खेतमा गयो भने के गर्छौ?		
	5	What would you do if a cat enters the kitchen in your presence? तिम्रो अगाडि विरालो भान्छामा गयो भने के गर्छौ?		
	5	If you have two rotis and I give you one more, how many will you have? यदि तिमिसँग दुईवटा रोटी छ र मैले एउटा रोटी दिएँ भने तिमि सँग कतिवटा रोटी हुन्छ?		
	6	Can more things be bought with 50p or Rs. 2? पचास पैसाले धेरै चिज किन्न सकिन्छ कि दुई रुपैयाले?		
	7	If you have six bananas and you give me four of them how many bananas would you have then? यदि तिमिसँग छ वटा केरा छ र त्यसमध्ये चार वटा सलाई दियो भने तिमिसँग कतिवटा बाँकी हुन्छ?		
	8	If one ballon costs 1 Rs how much would two cost\ यदि एउटा बेलुनको एक रुपैया पर्छ भने दुईवटा बेलुनको नकति पर्छ?		
	D	ANALOGIES		
3-4	1	This is a body and this is a..... यो केटा हो र यो.....		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
	2	An elephant is big and a mouse is..... हात्ति ठूलो हुन्छ र मुसा.....		
	3	We sleep at night and wake up in the हामी सुत्छौ राती र उठछी.....		
4-5	4	A bird lives in the nest and we live in चार गुडमा वस्छ र हामी.....		
	5	Hair is black and teeth are..... कपाल कालो हुन्छ र दाँत.....		
	6	Car moves fast and a cycle moves..... मोटर छिटो चल्छ र साइकल		
5-6	7	Ice is cold and fire is..... वरफ चिसो हुन्छ र आगो.....		
	8	Iron is heavy and cotton is फलाम गह्रौ हुन्छ र कपास		
	9	During the day there is light, at night it is दिनमा उज्यालो हुन्छ र राती.....		
	E	ACTION AGENT		
	1	What flies? के आफै उड्छ?		
	2	What swims? के पौडन्छ?		
4-5	3	What pours? के उम्रन्छ?		
	4	What is growth?		
5-6	5	What blooms? के फुल्छ?		
	6	What thunders? के गर्जिन्छ?		
	F	STORY RECALL SEQUENCE		
		Once there was a dur this name was heera. He lived in a jungle near by chitwan. Near by that hungle there is lot of dust and sand one day a strong blew in the jungle. Because of these some sand blew his eyes and Heera		

Age GP (Yrs)	S.NO.	Items	Desirable Response and Scoring	Remarks
		<p>immediately shut down. He shut "everyday adn get into my eyes what should I do about it". then he decided to buy a pair of sunglasses.</p> <p>एउटा मृग थियो उसको नाम हिरा थियो उ चितवन नजिकैको जंगलमा बस्थ्यो। त्यो जंगल नजिकै थुप्रै बालुबा र धुलो पनि थियो। एक दिन त्यहाँ आधिवेरी आयो र बाबुला हिराको आँखामा पस्यो उसले आँखा बन्द गन्यो। उसले विचार गन्यो दिन यसै गरी आँखामा बुलवा पारन्यो भने म के गरु उसले चस्मा किन्ने विचार गन्यो। उसले विचार गन्यो दिन यसै गरी आँखामा बालुबा पाह्यो भने म के गरु उसले चस्मा किन्ने विचार गन्यो।</p>		
3-4	1	What went into the deer's eyes? मृगको आँखामा के पाइयो?		
	2	Why did sand get into the deer's eyes? मृगको आँखामा बालुवा किन पस्यो?		
	3	Why did the deer shut his eyes? मृगले किन आँखा बन्द गरयो?		
	4	Why did the deer buy glasses? मृगले चस्मा किन किन्यो?		
	5	What is there near by jungel? जंगलको छेउमा के थियो?		
	6	What blew in the strom? आँधीवेरीमा के उड्यो?		
5-6	7	Where did the deer live? मृग कहाँ वस्थ्यो?		
	8	What was the name of the deer? मृगको नाम के थियो?		
	9	From where will heeru by his glasses? हिराले चस्मा कहाँ किन्ला?		

APPENDIX D2

Tool Developmental indicator for pre-schoolchildren

	Indicator	Scoring				Remarks
PM	Physical -motor	0	1	2	3	
1	Able to walk with ease.					
2	Able to walk on tip toe.					
3	Able to balance on one foot for short time.					
4	Able to run in straight direction with coordinated, alternating movement.					
5	Able to jump from height of 2-5 feet with / without arms stretched.					
6	Able to creep, roll on the ground.					
7	Able to hop at single spot once or twice.					
8	Able to climb up and down but not by alternating feet.					
9	Able to respond to rhythm or beat while clapping.					
10	Able to throw ball in general direction.					
11	Able to catch a large ball from very short distance.					
12	Able to kick a ball for short distance in general direction.					
13	Able to walk backward and forward with coordination.					
14	Able to balance on one foot for long time.					
15	Able to run smoothly with speed in coordinated manner.					
16	Able to jump from 4 feet with ease.					
17	Able to creep, crawl through narrow spaces.					
18	Able to hop on one foot five times.					
19	Able to climb up and down alternating feet.					
20	Able to respond to rhythm with body movements like clapping, jumping.					
21	Able to throw ball at a target with some precision.					
22	Able to catch a small ball thrown from a short distance using both arms.					
23	Able to kick a ball at a target with some					

	Indicator	Scoring				Remarks
PM	Physical -motor	0	1	2	3	
	precision.					
24	Able to walk with ease, rhythm and grace.					
25	Able to balance on one foot at a time for longer period.					
26	Able to run changing directions.					
27	Able to hop for some distance with ease.					
28	Able to climb up and down with speed.					
29	Able to do simple dance movements in tune with music.					
30	Able to throw ball at some target with precision.					
31	Able to catch a small ball thrown from a short distance using just hands...					
32	Able to kick a ball at a target with accuracy and precision.					
3.FMS	Fine motor skill					
1	Able to put stiff wire through large holes.					
2	Able to crumble and tear paper at random and paste pieces in large outline, not neatly.					
3	Able to scribble, draw, lines, copy circles.					
4	Able to color within a large outline though not neatly.					
5	Able to paint with brushes using different colors, large circular movements, not well coordinated					
6	Able to do simple folding using palm and fingers to form square and rectangular piece.					
7	Able to put stiff wire through smaller holes.					
8	Able to draw recognizable figures with crayons.					
9	Able to color within given outline neatly.					
10	Able to do brush painting with large sweeping movement and hold brush properly.					
11	Able to make complex shape through paper folding with adult guidance.					
12	Able to put a stiff wire through holes arranged in a complex fashion.					
13	Able to draw meaningful figures and shapes.					
14	Able to color within given outline neatly.					

	Indicator	Scoring				Remarks
PM	Physical -motor	0	1	2	3	
15	Able to paint meaningful figures though not very neatly.					
16	Able to make more complex and neat shape through folding.					
	Total					
4.SED	Socio -emotional development					
1	Sings and dances to music.					
2	Follow rules by imitating actions of other children.					
3	Greets familiar adults without reminder.					
4	Follows rules in group games led by adults.					
5	Ask permission to use toy that peer is playing with.					
6	Follow rules in group games lead by an older child.					
7	Cooperates with adult requests 75% of the time.					
8	Plays near and talks with other children when working on own project (30 minutes)					
9	Ask for assistance when having difficulty (with bathroom or getting a drink)					
10	Contribute to adult conversation.					
11	Repeats rhymes, songs, or dance for others.					
12	Works alone at choire for 20-30 minutes.					
13	Apologies without reminder 75%of the time.					
14	Will take turns with 8-9 other children					
15	Plays with 2-3 children for 20 minutes in cooperative activity.					
16	Asks permission to use objects belonging to others 75%of the time.					
17	Relates experiences (social or language)					
18	States feeling about self mood:-happy ,love					
19	Play with 4-5 children on cooperative activity without.					
20	Constant supervision. Plays simple table games.					
	Explains rules of game or activity to others.					
21	Imitates adult rules.					

	Indicator	Scoring				Remarks
PM	Physical -motor	0	1	2	3	
22	Joins in conversation at meal times.					
23	Comforts playmates in distress.					
	Total					
5.SHS	Self- help skills					
1	Ask to go to toilet.					
2	Removes shirt or frock.					
3	Eats with spoon.					
4	Drink water (unassisted)					
5	Feeds self entire meal.					
6	Dresses self with help on pullover, shirt and all fasteners.					
7	Dries own hands.					
8	Wipes nose when reminded.					
9	Wakes up dry two mornings out of seven.					
10	Initiates and completes dressing and undressing except fasteners 75% of time.					
11	Snipe hooks clothing.					
12	Blows nose when reminded.					
13	Avoids common dangers (i.e. broken glass).					
14	Buttons large buttons on board or jacket placed on the table.					
15	Washes hands unaided.					
16	Unbuttons own clothing.					
17	Buttons own clothing.					
18	Cares for self at toilet.					
19	Washes hands and face unassisted.					
20	Uses correct utensils for food.					
21	Wipes and blows nose 75% of the times when needed without reminder.					
22	Brushes teeth.					
23	Goes about neighborhood unattended.					
24	Laces shoes.					
25	Ties shoes.					
26	Is trusted with money.					

	Indicator	Scoring				Remarks
PM	Physical -motor	0	1	2	3	
	Walks to school, playground or store within two blocks of home independently, goes to school unattended.					
27	.					
	Total					
	Development assessment measure for pre-schoolchildren					
6.DAM I	Items					
	Performance					
1	Making the same pattern					
2	Following instruction					
3	Visual discrimination					
4	Classification					
5	Number concept					
6	Visual memory					
7	Temporal relationship					
8	Auditory memory					
	Verbal					
8	Information					
9	Verbal problem solving					
10	Arithmetic reasoning					
11	Analogies					
12	Action agent					
13	Story recall sequence					
14						
	Total					

APPENDIX E

TEACHER RATING SCALE

For Teacher

Name of the Child:

Age:

Name of school:

Class:

Name of Teacher:

Please read properly and tick () according to child's response in the class:

1. Understanding the instructions given in the classroom.

- a. Always understand.
- b. Usually understand.
- c. Sometimes understand.
- d. Never understand.

2. Vocabulary according to curriculum.

- a. Lot of vocabulary according to age and class.
- b. Enough vocabulary according to age and class.
- c. Not enough vocabulary according to age and class.
- d. Less vocabulary according to age and class.

3. Pronunciation of the word.

- a. Always clear and correct pronunciation.
- b. Usually clear and correct pronunciation.
- c. Usually unclear and incorrect pronunciation.
- d. Always unclear and incorrect pronunciation.

4. Answer to the question asked.

- a. Complete sentences without mistakes.
- b. Complete sentences but with some mistakes.
- c. Incomplete sentences.
- d. Cannot answer the question.

5. Child's expression experience in the class.

- a. Can express easily.
- b. Tries to express.
- c. Usually can't express.
- d. Can't express.

6. Can copy from the book or black board.

- a. Can copy correctly and clearly.
- b. Sometimes makes mistake.
- c. Always makes mistake.
- d. Can't copy from book or blackboard.

7. Attention in the class.

- a. Always attentive.
- b. Usually attentive.
- c. Sometimes attentive.
- d. Never attentive.

8. Do home work and class work.

- a. Always does.
- b. Usually does.
- c. Sometime does.
- d. Never does.

9. Self-confidence.

- a. Always confident.
- b. Confident in some area.
- c. Not so much confident.
- d. No confidence.

10. Participation in any work.

- a. Always takes responsibility.
- b. Takes responsibility after teacher's order.
- c. Sometimes takes responsibility after teacher's order.
- d. Does not take responsibility.

11. Attendance in school.

- a. Regular.
- b. Usually regular.
- c. Sometimes go to school.
- d. Irregular.

12. Neatness and cleanliness.

- a. Always neat and clean.
- b. Usually neat and clean.
- c. Sometime neat and clean.
- d. Always dirty.

13. Helping attitude and get along with friends.

- a. Always friendly with all children.
- b. Friendly with few children.
- c. Friendly with neighboring children only.
- d. Not friendly with other children.

14. Brings the reading writing materials.

- a. Always brings.
- b. Usually brings.
- c. Does not bring everything, borrows from others.
- d. Never brings reading and writing materials.

15. Taking care of belongings.

- a. Always takes care.
- b. Usually takes care.
- c. Sometimes takes care.
- d. Never takes care.

16. Fighting with classmates.

- a. Never fights.
- b. Sometimes fights.
- c. Usually fights.
- d. Always fights.

17. Participating in fighting.

- a. Do not participate in the fight.
- b. Sometime participate in the fight.
- c. Usually participate in the fight.
- d. Always participate in the fight.

18. Steal things from classroom.

- a. Never.
- b. Sometimes.
- c. Usually.
- d. Always.

19. While playing with friends.

- a. Always cooperative and plays together.
- b. Usually plays together.
- c. Sometimes plays alone
- d. Always plays alone.

20. While coming to school.

- a. Always in happy mood.
- b. Usually in happy /pleasant mood.
- c. Sometimes in pleasant mood.
- d. Always in unpleasant mood.

APPENDIX E1

रेटिंग स्केल

बच्चाको नाम :

उमेर:

कक्षा :.....

स्कूलको नाम

कृपाय ध्यान दिएर पढनुस। बच्चालाई ध्यानमा शखेर सहि उत्तरमा () चिन्ह लगाउँनुहोस्।

१. कक्षामा दिए को निर्देशन—:

- क) बच्चाले संधै जस्तै बुझ्छ।
- ख) धेरै जस्तो बुझ्छ।
- ग) कहिले काहीं मात्र बुझ्छ।
- घ) पटवकै बुझ्दैन।

२. बच्चाको शब्द ज्ञान (पाठ्यक्रम अनुसार)

- क) उमेर र कक्षाको हिसाबमा धेरै शब्द ज्ञान।
- ख) उमेर र कक्षा अनुसार पर्याप्त शब्द ज्ञान।
- ग) उमेर र कक्षा अनुसार कम शब्द ज्ञान।
- घ) उमेर र कक्षा अनुसार धेरै कम शब्द ज्ञान।

३. शब्द—उच्चारण:—

- क) सबै स्पष्ट र शुद्ध उच्चारण।
- ख) धेरै स्पष्ट र शुद्ध उच्चारण।
- ग) धेरै स्पष्ट र अशुद्ध उच्चारण।
- घ) सबै अस्पष्ट र अशुद्ध उच्चारण।

४. प्रश्न सोध्दा, बच्चाको उत्तर:—

- क) पूरा वाक्यमा कुनै गल्ती बिना उत्तर दिन्छ।
- ख) पूरा वाक्यमा तर केही गल्ती गरेर उत्तर दिन्छ।

ग) अधूरो वाक्यमा उत्तर दिन्छ ।

घ) पटकै उत्तर दिन सक्दैन ।

५. बच्चाको आफ्नो अनुभव कक्षामा:—

क) क्रमै संग राम्ररी भन्न सक्छ ।

ख) भन्ने कोशीश गर्छ ।

ग) धेरै जसो भन्न सक्दैन ।

घ) सधै जसो भन्न सक्दैन ।

६. किताब वा कालोपाटीमा लेखेको सार्ने :—

क) एकदम सही र स्पष्ट सार्छ ।

ख) सार्दा केही गल्ती सार्छ ।

ग) सार्दा धेरै गल्ती गर्छ ।

घ) पटकै सार्न सक्दैन ।

७. कक्षामा ध्यान :—

क) सधै हुन्छ ।

ख) सधै जसो हुन्छ ।

ग) कहिलेकाँही मात्र हुन्छ ।

घ) पटकै हुदैन ।

८. कक्षाकार्य र गृहकार्य समय:—

क) सधै

ख) धेरै जसो

ग) कहिलेकाही

घ) कहिल्यै नगर्ने ।

९. बच्चामा आत्मविश्वास

- क) पूर्ण आत्मविश्वास छ ।
- ख) कुनै क्षेत्रमा आत्मविश्वास छ ।
- ग) आत्मविश्वास केही कम छ ।
- घ) आत्मविश्वास पटकै छैन ।

१०. कूना काम गर्ने:-

- क) आफैले पहल गर्ने ।
- ख) शिक्षकले भनेपछि जिम्मेवारी लिन्छ ।
- ग) शिक्षकले भनेपछि कहिलेकाही जिम्मेवारी लिन्छ ।
- घ) शिक्षकले भन्दा पनि जिम्मेवारी लिदैन ।

११. स्कूलमा उपस्थिति:-

- क) बच्चा सधैं स्कूल जान्छ ।
- ख) धेरै जसो स्कूल जान्छ ।
- ग) कहिलेकाँही जान्छ ।
- घ) धेरै कम जान्छ ।

१२. बच्चाको व्यक्तिगत सरसफाई:-

- क) सधैं सफ सुगन्ध ।
- ख) धेरै जसो सफ सुगन्ध ।
- ग) कहिलेकाँही सफ सुगन्ध ।
- घ) कहिल्यै पनि सफ सुगन्ध हुँदैन ।

१३. आपसी सहयोग:-

- क) बच्चाहरू संग पूर्ण रूपले घुलमिल हुन्छ ।
- ख) केही बच्चाहरू संग मात्र घुलमिल हुन्छ ।
- ग) आपनो वरीपरीका वा नजिकका बच्चाहरू संग मात्र घुलमिल हुन्छ ।
- घ) बच्चाहरू संग पटकै घुलमिल हुँदैन ।

१४. पढाई लेखाई संग सम्बन्धित चिजहरु साथमा ल्याएको हुने वा नहुने:-

क) सधै सबै सामान (कापी, किताब, पेन्सिल आदी) ल्याउँछ ।

ख) धेरैजसो सामान ल्याउँछ ।

ग) धेरैजसो सामान ल्याउँदैन, अरु बच्चाहरु संग माग्छ ।

घ) कहिल्यै पनि ल्याउँदैन र अरु बच्चाहरु संग माग्छ ।

१५. सामानको रेखदेख:-

क) आफ्नो सामान सधै राम्रो संग जतनले राख्छ ।

ख) आफ्नो सामान धेरैजसो जतनले राख्छ ।

ग) कहिलेकाँही जतन गरेर राख्छ ।

घ) आफ्नो सामानको पटकै वास्ता गर्दैन ।

१६. कक्षामा लडाई/झगडा:-

क) पटकै लडाई/झगडा गर्दैन ।

ख) कहिलेकाही लडाई/झगडा गर्छ ।

ग) धेरैजसो लडाई/झगडा गर्छ ।

घ) दिनहुँ लडाई/झगडा गर्छ ।

१७. झगडामा भाग लिने:-

क) झगडाबाट टाढा बस्छ ।

ख) कहिलेकाही झगडामा संलग्न हुन्छ ।

ग) धेरैजसो झगडामा संलग्न हुन्छ ।

घ) सधै झगडा शुरू गर्छ ।

१८. कक्षाका साथीहरुको सामान लिने चोरी गर्ने:-

क) कहिल्यै लिदैन ।

ख) कहिलेकाही लिन्छ ।

ग) धेरैजसो लिन्छ ।

घ) सधै लिन्छ ।

१९. साथीहरू संग खेल खेल्दा:—

- क) सधैं मिलेर खेल्छ ।
- ख) सधैं एकलै खेल्न मन पराउँछ ।
- ग) कहिलेकाँही मिलेर खेल्छ ।
- घ) धेरै जसो मिलेर खेल्छ ।

२०. विद्यालय आउँदा:—

- क) सधैं प्रशन्न हुन्छ ।
- ख) कहिलेकाही मात्र प्रशन्न हुन्छ ।
- ग) धेरै जसो प्रशन्न हुन्छ ।
- घ) सधैं अप्रशन्न हुन्छ (रुन्छ) ।

APPENDIX F

QUESTIONNAIRE FOR PRINCIPAL/TEACHER

Title of research: Development During Early Childhood: Pre-primary Education in Nepal
Date:

Investigator's Name:

Name of the School: High /Secondary /Primary school

School establishment date:

Total no. of student :

Address: VDC/Ward:

Personal details of principal /Teacher

1. Name:

2. Sex:

1.	Male	
2.	Female	

3. Age:

1.	Less than 20	
2.	22-30	
3.	31-40	
4.	41-50	
5.	50 over	

4. Marital status:

1.	Married	
2.	Unmarried	
3.	Widow	
4.	Separated	
5.	Divorced	

5. Educational qualification:

1.	M.A.	
2.	B.A., Bed	
3.	IA., 10+2	
4.	SLC	

6. Years of experience as a teacher:

1.	Less than 5 years	
2.	5-10	
3.	11-15	
4.	16-20	
5.	More than 20years	

7. Years of service in this school as a principal/ teacher:

1.	Less than 5 years	
2.	5-10	
3.	11-15	
4.	16-20	
5.	More than 20years	

8. Distance from School to home:

1.	Less than 5 km.	
2.	1 - 2.5 km.	
3.	2.5 - 3.5 km.	
4.	More than 3.5 km	

9. Mode of travel:

1.	Walking	
2.	Cycle	
3.	Bike	
4.	Bus	
5.	Other	

10. Time to reach school from home:

1.	Less than 20 minutes	
2.	21-30 minutes	
3.	31-40 minutes	
4.	41-50 minutes	
5.	More than one hour	

11. Total number of teacher in your school.

1.	Less than 5	
2.	5 - 10	
3.	11 - 15	
4.	16 - 20	
5.	More than 20	

12. Total number of students in whole school.

1.	Less than 100	
2.	101 -200	
3.	201- 300	
4.	301- 400	
5.	More than 400	

12. a Total number of children in preprimary classes.

1.	Less than 20	
2.	21- 40	
3.	41- 60	
4.	61-80	
5.	More than 80	

12. b Total number of children in LKG class.

1.	10-17	
2.	18-25	
3.	26-33	
4.	34-41	
5.	42-49	

13. Number of trained preschool teacher

1.	1-2	
2.	3-4	
3.	5-6	
4.	7-8	
5.	More than 8	

14. What kind of training you receive?

1.	ECD	
2.	Montessori	
3.		
4.		
5.	Others	

15. What is the name of training institute?

1.	Save the children US	
2.	Seto gurans	
3.	Ministry of education	
4.	UNICEF	
5.	Others	

16. Duration of training:

1.	Less than one week	
2.	One week	
3.	Two weeks	
4.	6 months	
5.	More than 6 months	

17. Any refresher course received from school?

1.	Yes	
2.	No	

18. Parents Teacher Meeting:

1.	Regular	
2.	Sometime	
3.	Never	

19. Topics discussed at meeting

1.	Academic progress	
2.	Curriculum	
3.	Vacation /exam	
4.	Child behavior and holistic development	
5.	Others	

20. Problems faced by principal at school:

1.	Lack of trained/experienced teacher	
2.	Teacher are not regular	
3.	Teachers leave in the middle of the session	
4.	Teachers do not work hard	
5.	Others	

21. Problems faced by teacher at school

1.	More work and low salary	
2.	Not enough teaching materials	
3.	Poor school environment	
4.	Poor class room arrangements	
5.	Others	

22. Job satisfaction:

1.	Satisfied	
2.	Not satisfied	

23. Age of preprimary children in your school.

1.	2 -5 years	
2.	3-5 years	
3.	4-6 years	
4.	4-7 years	

24. How many hours do pre-primary children stay in school?

1.	Less than 5 hours	
2.	5 hours	
3.	6 hours	
4.	More than 6 hours	

25. Playing hours for preschooler in the school:

1.	Less than 30 minutes	
2.	30 - 45 minutes	
3.	45 - 60 minutes	
4.	61 - 75 minutes	
5.	More than 75 minutes	

26. Do you have enough space and playing materials for outdoor play?

1.	Yes	
2.	No	

27. Do you have enough space and playing materials for indoor play?

1.	Yes	
2.	No	

28. Is there resting provision and time for preschooler in your school?

1.	Yes	
2.	No	

29. How many hours children rest in your school?

1.	Less than 30 minutes	
2.	30-45-minutes	
3.	46-60minutes	
4.	More than 60 minutes	

30. How many hour do children learn 3Rs?

1.	One hour	
2.	Two hour	
3.	Three hour	
4.	Four hour	

31. Do you use different learning materials in your preprimary class?

1.	Yes	
2.	No	

32. Is there home work for the preschooler in your school? Every day?

1.	Yes	
2.	No	

33. Do you have ECE curriculum for preschooler?

1.	Yes	
2.	No	

34. Do you follow the ECE curriculum?

1.	Yes	
2.	No	

35. Do you have any support from any organization to run Pre-primary classes?

1.	Yes	
2.	No	

35. a. If yes, from which organization?

1.	Basic and primary education project	
2.	Save the Children/US	
3.	Plan international Nepal	
4.	Seto Gurans	
5.	Others	

APPENDIX F1

QUESTIONNAIRE FOR PARENTS

Date:

Title of research: Development During Early Childhood: Pre-primary Education in Nepal

Respondent: Mother

Q1) Name and code of the School: -----

Q2) Address of school: ----- VDC / Ward-----

Q3) Name of child studying in this school: -----

Q4) Class: -----

Q5) Father's name: -----

Q5a. Age

1.	20-25	
2.	26-30	
3.	31-35	
4.	36-40	

Q5b. Educational qualification:

1.	Literate	
2.	Grade 1-5	
3.	Grade 6-9	
4.	High school	
5.	Graduate	
6.	Post graduate	

Q5c. Occupation:

1.	Service	
2.	Household work	
3.	Business	
4.	Others(specify):	

Q6) Mother's name: -----

Q6a. Age:

1.	20-25	
2.	26-30	
3.	31-35	
4.	36-40	

Q6b. Educational qualification:

1.	Literate	
2.	Grade 1-5	
3.	Grade 6-9	
4.	High school	
5.	Graduate	
6.	Post graduate	

Q6c. Occupation:

1.	Service	
2.	House wife	
3.	Business	
4.	Others(specify):	

Q7) Types of family:

1.	Joint	
2.	Nuclear	

Q8) How many children do you have?

1.	One	
2.	Two	
3.	Three	
4.	More than three	

Q8a. No. of son:

1.	One	
2.	Two	
3.	Three	
4.	More than three	

Q.8.b. No of daughter:

1.	One	
2.	Two	
3.	Three	
4.	More than three	

Q9) Do you think children learn by playing?

1.	Yes	
2.	No	

Q10) If yes, how many hours you manage for your child to play.

1.	Less than one hour	
2.	One hour	
3.	Two hour	
4.	More than two hour	

Q11) What kind of play does your child prefer the most every day?

1.	Toys, cycle, etc.	
2.	Nature (sand ,soil, stone, mud, etc)	
3.	Hide and seek	
4.	Others	

Q12) How many toys do you have for your child?

1.	a lot	
2.	enough	
3.	few	
4.	very few	

Q13). What kind of toys do you have for your child?

1.	Stuff toys/expensive	
2.	Stuff toys/not much expensive	
3.	Homemade toys	
4.	Made by recyclable waste materials.	

Q14) Do you tell or read stories for your child at home?

1.	Yes	
2.	No	

Q15) Who read or tells stories for your child?

1.	Mother	
2.	Father	
3	Grand parents	
4	Others	

Q16) How many songs and rhymes can your child sing?

1.	Less than three	
2.	4-6	
3.	6-8	
4.	More than 8	

Q17) Where did he/she learn songs and rhymes?

1.	At school	
2.	With peer group	
3.	With elders	
4.	From T.V., radio	
5.	Others	

Q18) Does your child enjoy going to School?

1.	Yes	
2.	No	

Q19) Are there enough playing area and playing materials in his/her school?

1.	Yes	
2.	No	

Q20) Is there enough playing area at home?

1.	Yes	
2.	No	

Q21) Does his/her school allow enough time for playing?

1.	Yes	
2.	No	

Q22) Do you or other family member allow enough time for your child to play at home?

1.	Yes	
2.	No	

Q23) Does your child get lots of home work every day?

1.	Yes	
2.	No	

Q24) Are you satisfied from the school services?

1.	Yes	
2.	No	

Q25) The best part of this school, you like:

1.	Affordable fee	
2.	Loving and caring	
3.	Friendly and good atmosphere	
4.	Teach well	
5.	Others	

Q26) Do you know about ECD (Early Childhood Development)?

1.	Yes	
2.	No	

Q27) What do you understand by ECD?

1.	Holistic development	
2.	Cognitive	
3.	Loving and caring	
4.	Physical development	
5.	Others	

Q28) Any complain about school management?

1.	Yes	
2.	No	

Q29) If yes, about whom?

1.	Teacher's and care givers' behavior	
2.	Cleanliness	
3.	Caring	
4.	Others	

Q30) Is the school expensive?

1.	Yes	
2.	No	

Q31) How much you have to pay per month?

1.	Less than 300.	
2.	300-600	
3.	600-800	
4.	More than 800	

Q32) What's your opinion about child's class teacher or care giver?

1.	Friendly and caring, polite	
2.	Punctual, hard working	
3.	Not punctual, strict, impolite	
4.	Others	

Q33) Why are you sending your child in this school? Because

1.	Near from home	
2.	It is a High school	
3.	It is English medium school	
4.	It has good reputation.	

APPENDIX G

COMPARISON OF SCHOOL ENVIRONMENT (ANOVA)

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
Physical set up	prs	psus	9	10.863	0.956
		pus	-20.667	10.863	0.445
		grs	10	10.863	0.934
		gsus	2.333	10.863	1
		gus	-1.667	10.863	1
	psus	prs	-9	10.863	0.956
		pus	-29.667	10.863	0.139
		grs	1	10.863	1
		gsus	-6.667	10.863	0.988
		gus	-10.667	10.863	0.915
	pus	prs	20.667	10.863	0.445
		psus	29.667	10.863	0.139
		grs	30.667	10.863	0.12
		gsus	23	10.863	0.34
		gus	19	10.863	0.528
	grs	prs	-10	10.863	0.934
		psus	-1	10.863	1
		pus	-30.667	10.863	0.12
		gsus	-7.667	10.863	0.978
		gus	-11.667	10.863	0.883
	gsus	prs	-2.333	10.863	1
		psus	6.667	10.863	0.988
		pus	-23	10.863	0.34
		grs	7.667	10.863	0.978
		gus	-4	10.863	0.999
	gus	prs	1.667	10.863	1
		psus	10.667	10.863	0.915
		pus	-19	10.863	0.528
		grs	11.667	10.863	0.883
		gsus	4	10.863	0.999
Health and hygiene	prs	psus	0.667	3.097	1
		pus	-9	3.097	0.105
		grs	3	3.097	0.919
		gsus	2	3.097	0.985
		gus	0	3.097	1
	psus	prs	-0.667	3.097	1
		pus	-9.667	3.097	0.074
		grs	2.333	3.097	0.97
		gsus	1.333	3.097	0.998
		gus	-0.667	3.097	1
	pus	prs	9	3.097	0.105
		psus	9.667	3.097	0.074
		grs	12.000*	3.097	0.021
		gsus	11.000*	3.097	0.036
		gus	9	3.097	0.105
	grs	prs	-3	3.097	0.919
		psus	-2.333	3.097	0.97
		pus	-12.000*	3.097	0.021

Task	(I) code of children	(J) code of children	Mean Difference (I-J)	Std. Error	Sig.
		gsus	-1	3.097	0.999
		gus	-3	3.097	0.919
	gsus	prs	-2	3.097	0.985
		psus	-1.333	3.097	0.998
		pus	-11.000*	3.097	0.036
		grs	1	3.097	0.999
		gus	-2	3.097	0.985
	gus	prs	0	3.097	1
		psus	0.667	3.097	1
		pus	-9	3.097	0.105
		grs	3	3.097	0.919
		gsus	2	3.097	0.985
Conceptual /curricular content	prs	psus	4.333	10.251	0.998
		pus	-40.000*	10.251	0.02
		grs	15	10.251	0.692
		gsus	3.667	10.251	0.999
		gus	-2	10.251	1
	psus	prs	-4.333	10.251	0.998
		pus	-44.333*	10.251	0.01
		grs	10.667	10.251	0.895
		gsus	-0.667	10.251	1
		gus	-6.333	10.251	0.987
	pus	prs	40.000*	10.251	0.02
		psus	44.333*	10.251	0.01
		grs	55.000*	10.251	0.002
		gsus	43.667*	10.251	0.011
		gus	38.000*	10.251	0.028
	grs	prs	-15	10.251	0.692
		psus	-10.667	10.251	0.895
		pus	-55.000*	10.251	0.002
		gsus	-11.333	10.251	0.87
		gus	-17	10.251	0.58
	gsus	prs	-3.667	10.251	0.999
		psus	0.667	10.251	1
		pus	-43.667*	10.251	0.011
		grs	11.333	10.251	0.87
		gus	-5.667	10.251	0.992
	gus	prs	2	10.251	1
		psus	6.333	10.251	0.987
		pus	-38.000*	10.251	0.028
		grs	17	10.251	0.58
		gsus	5.667	10.251	0.992
*. The mean difference is significant at the 0.05 level.					

APPENDIX H

BODY MASS INDEX OF PRE PRIMARY SCHOOL CHILDREN AND NON SCHOOL GOING CHILDREN IN NEPAL

Distribution of all Sample Children on BMI

	Boys	Girls	Total
Number of children assessed:	100	100	200
Underweight (< 5th %ile)	6	0	6
Normal BMI (5th - 85th %ile)	89	95	184
Overweight or obese (\geq 85th %ile)*	5	5	10

Distribution of Children in Private Rural Schools according to BMI

	Boys	Girls	Total
Number of children assessed:	12	12	24
Underweight (< 5th % ile)	1	0	1
Normal BMI (5th - 85th % ile)	11	11	22
Overweight or obese (\geq 85th %ile)*	0	1	1

Distribution of Children from Private Semi Urban School Children on BMI

	Boys	Girls	Total
Number of children assessed:	12	12	24
Underweight (< 5th %ile)	1	0	1
Normal BMI (5th - 85th %ile)	9	10	19
Overweight or obese (\geq 85th %ile)*	2	2	4

Distribution of Children from Private Urban School Children on BMI

	Boys	Girls	Total
Number of children assessed:	12	12	24
Underweight (< 5th %ile)	1	0	1
Normal BMI (5th - 85th %ile)	11	12	23
Overweight or obese (\geq 85th %ile)*	0	0	0

Distribution of Children from Government Rural School Children on BMI

	Boys	Girls	Total
Number of children assessed:	12	12	24
Underweight (< 5th %ile)	1	0	1
Normal BMI (5th - 85th %ile)	10	11	21
Overweight or obese (\geq 85th %ile)*	1	1	2

Distribution of Children from Government Semi Urban School Children on BMI

	Boys	Girls	Total
Number of children assessed:	12	12	24
Underweight (< 5th %ile)	1	0	1
Normal BMI (5th - 85th %ile)	9	12	21
Overweight or obese (\geq 85th %ile)*	2	0	2

Distribution of Children from Government Urban School Children on BMI

	Boys	Girls	Total
Number of children assessed:	12	12	24
Underweight (< 5th %ile)	0	0	0
Normal BMI (5th - 85th %ile)	12	12	24
Overweight or obese (\geq 85th %ile)*	0	0	0

Distribution of Non School Going Children on BMI

	Boys	Girls	Total
Number of children assessed:	28	28	56
Underweight (< 5th %ile)	1	0	1
Normal BMI (5th - 85th %ile)	27	27	54
Overweight or obese (\geq 85th %ile)*	0	1	1

APPENDIX I

PROFILE OF PRINCIPALS

S.No.	Demographic Data	Private schools (n=9)	Government schools (n=9)	Total (n=18)
1	Sex			
	Male	6	7	
	Female	3	2	18
2	Age			
	21-30	2	-	
	31-40	5	2	
	41-50	1	2	
	51-60	1	5	18
3	Marital status			
	Married	8	9	
	Single	1	-	18
4	Education			
	Graduate	2	6	
	Post graduate	7	3	18
5	Teaching Experience			
	0-10	6	-	
	20-Nov	3	2	
	21-30	-	4	
	More than 30 years	-	3	18
6	Experience as principal			
	0-5	6	3	
	10-Jun	1	4	
	15-Nov	1	2	
	16-20	1-	-	18
	Total			
7	Distance from school			
	Less than .1 km	5	5	
	1- 2 km	2	-	
	2-4km	1	-	
	4-6km	1	1	
	More than 6km		3	18
8	Mode of travel			
	Walking	7	5	

S.No.	Demographic Data	Private schools (n=9)	Government schools (n=9)	Total (n=18)
	Bike	1	3	
	Local bus	1	1	18
9	Time to reach school			
	Less than 20minutes	6	2	
	21-30minutes	3	4	
	31-40minutes	-	3	18
	4 More than 40 minutes	-	-	
10	Total number pre-primary teacher in the school			
	1-2	7	9	
	3-4	2	-	
	4-6	-	-	
	More than 6	-	-	18
11	Trained teacher in pre-primary			
	1-2	7	9	
	3-4	1	-	
	4-6	1	-	
12	Duration of training			
	5 days			
	One week			
	6 months			
	10 months			
13	Kinds of training			
	ECD	8	1	
	Montessori	1	1	
	Education	-	7	
14	Name of training institute			
	Nepal Government			
	7	2		
	Education Campus T.U.	-	7	
	Rato Bangla	1	-	
	Divyankur	1	-	
	Other	-		

S.No.	Demographic Data	Private schools (n=9)	Government schools (n=9)	Total (n=18)
15	Refresher course			
	Yes	2	-	
	No	7	9	
16	Parent teacher meeting			
	Regular	2	-	
	Sometime	7	2	
	Never	-	7	
17	Topics of discussion			
	About academic progress	5	2	
	About holistic development of the child	2	-	
	Child behavior and holistic development and curriculum	2	-	
18	Problem of principal and school management			
	Teachers are not regular	1	6	
	Teacher do not follow teaching methods	-	3	
	Difficult to find good teacher	6	-	
	Every year have to find new teacher	2	-	
19	Job satisfaction			
	Yes	5	9	
	No	4	-	

APPENDIX I1
PROFILE OF TECAHERS

S.No.	Parameters	Private schools (n=9)	Government schools(n=9)	Total (n=18)
	Total (n=18)			
1	Sex			
	Male	-	-	
	Female	9	9	18(100%)
2	Age			
	20-30	8	6	14(77.77%)
	31-40	1	3	4(22.22%)
	41-50	-	-	
	51-60	-	-	
3	Marital status			
	Married	5	8	13(72.22%)
	Single	4	1	5 (27.77%)
4	Education			
	Intermediate	5	7	12(66.66%)
	Graduate	4	2	6(33.33%)
	Post graduate	-	-	
5	Teaching Experience			
	0-5	7	4	11(61.11%)
	10-Jun	2	5	7(38.88%)
	More than 10 years	-	-	
6	Distance from school			
	Less than .1 km	2	-	2(11.11%)
	1- 2 km	1	3	4(22.22%)
	3-4km	2	1	3(16.66%)
	5-6km	3	3	6(33.33%)
	More than 6km	1	2	3(16.66%)
7	Mode of travel			
	Walking	3	4	7(38.88%)
	Bike	-	-	-
	Local bus	4	2	6(33.33%)
	Walk + Bus	2	3	5(27.77%)
8	Time to reach school			
	Less than 20minutes	3	2	5(27.77%)
	21-30minutes	2	1	3(16.66%)
	31-40minutes	-	1	1(5.55%)
	4 More than 40 minutes	4	5	9(50%)

S.No.	Parameters	Private schools (n=9)	Government schools(n=9)	Total (n=18)
9	Problem of teacher			
	Low salary and much work and not enough teaching materials	5	-	5(27.77%)
	Not enough teaching materials	2	-	2(11.11%)
	Low salary	2	-	
	Poor school environment	-	9	9(50%)
10	Job satisfaction			
	Satisfied	4	7	11(61.11%)
	Not satisfied	5	2	7(38.88%)
11	Do you know what ECD is?			
	Yes	9	9	18(100%)
	No	-	-	
12	Did you get training of ECD?			
	Yes	9	9	18(100%)
	No	-	-	
13	What kinds of training you did?			
	Education course	-	7	7(38.88%)
	ECD	8	1	9(50%)
	Montessori	1	1	2(11.11%)
14	Duration of training			
	5 days	2	-	2(11.11%)
	one week	5	2	7(38.88%)
	two weeks	1	-	1(5.55%)
	6 months	1	-	1(5.55%)
	10 months		7	7(38.88%)
15	Name of training institute			
	Nepal Government (DEO)	7	2	9(50%)
	Dibyankur Ecd Training center	1	-	1(5.55%)
	Rato Bangla	1	-	1(5.55%)
	Education Campus , T.U.	-	7	7(38.88%)

APPENDIX I2
PROFILE OF PARENTS

S. No.	Demographic data	Total (n=40 + 40)	Remarks
1	.Age of Mother		
	20-25	9 (22.5 %)	
	26-30	24 (60%)	
	31-35	6 (15%)	
	36-45	1(2.5%)	
-	Age of Father		
	20-25	2 (5%)	
	26-30	20(50%)	
	31- 35	16(40%)	
	36-45	2(5%)	
2	Mother's education		
	Illiterate	9(22.5%)	
	Grade 1-5	11(27.5%)	
	Grade 6-9	9(22.5)	
	High school	7(17.5%)	
	Graduate	2(5%)	
	Post graduate	2(5%)	
-	Father's education		
	Illiterate	2(5%)	
	Grade 1-5	8(20%)	
	Grade 6-9	9(22.5%)	
	High school	12(30%)	
	Graduate	6(15%)	
	Post graduate	3(7.5%)	
3	Mother's occupation		
	Agriculture	1(2.5%)	
	House wife	22(55%)	
	Labor	7(17.5%)	
	Teaching	4(10%)	
	Tailoring	3(7.5%)	
	Others	3(7.5%)	
-	Father's occupation		
	Agriculture	2(5%)	
	Foreign labor	12(30%)	

S. No.	Demographic data	Total (n=40 + 40)	Remarks
	Service	5(12.5%)	
	Labor	3(7.5%)	
	Business	4(10%)	
	Porter	4(10%)	
	Others	10(25%)	
4	Family Pattern		
	Joint family	16(40%)	
	Nuclear family	24(60%)	
5	Number of Children		
	One	2(5%)	
	Two	27(67.5%)	
	Three	9(22.5%)	
	Four	2(5%)	
6	Number of son		
	One	27(67.5%)	
	Two	8(20%)	
	No son	5(12.5%)	
7	No of daughter		
	One	21(52.5%)	
	Two	12(30%)	
	Three	1(2.5%)	
	No daughter	6(15%)	

APPENDIX J

SCORES ON EARLY CHILDHOOD SCHOOL ENVIRONMENT OBSERVATION AND RATING SCALE

Schools	Physical set up						Health and hygiene			Conceptual /curricular content												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	LO	SUR	OS	SF	IS	CR	IE	HP	HF	NF	PRO	AC	BA	EV.	TL	TM	PM	UM	LA	CA	DS	PS
PRS.1	6	6	2	3	1	11	8	4	2	4	4	6	2	4	10	9	4	2	2	2	5	4
PRS.2	8	6	4	6	2	14	10	8	2	4	6	6	2	4	10	9	5	2	2	2	5	4
PRS.3	9	8	5	9	2	16	10	8	3	4	5	5	1	4	10	9	5	2	2	2	4	4
PSUS.4	9	9	6	9	3	16	9	9	4	4	7	7	2	5	10	10	5	2	2	2	5	4
PSUS.5	6	3	2	3	1	8	6	4	2	4	6	3	1	4	10	9	3	2	2	2	5	4
PSUS.6	6	4	2	3	1	6	7	4	2	4	4	3	1	3	5	5	3	2	2	2	5	4
PUS.7	9	6	6	6	3	15	11	9	3	4	6	6	2	6	15	15	5	4	4	3	6	6
PUS.8	11	9	6	9	3	19	12	11	4	6	8	7	2	6	15	15	8	7	5	5	7	6
PUS.9	10	12	8	12	4	23	14	16	7	6	12	12	3	8	20	20	8	6	6	6	8	6
GRS.10	8	6	4	5	1	12	8	4	2	4	4	3	1	3	5	5	4	2	2	2	5	4
GRS.11	5	3	2	4	2	8	6	4	2	4	5	3	1	2	5	5	4	2	2	2	5	4
GRS.12	8	6	5	4	2	11	6	4	2	4	4	3	1	2	5	5	4	2	2	2	5	4
GSUS.13	6	3	3	3	2	8	6	4	2	4	4	3	1	2	5	5	3	2	2	2	4	4
GSUS.14	9	8	5	6	2	14	10	6	2	4	6	6	1	4	10	10	5	4	3	2	5	4
GSUS.15	11	8	5	6	2	14	8	5	2	4	5	3	1	4	9	13	5	2	2	2	5	5
GUS.16	10	3	3	4	3	8	6	4	2	4	4	3	1	3	9	6	3	2	2	2	5	4
GUS.17	11	6	4	9	3	18	13	11	3	4	7	6	1	6	15	15	5	4	4	4	5	5
GUS.18	9	6	2	6	3	16	8	5	2	4	7	6	1	5	6	6	3	2	2	2	5	4
Total Score																						
LO =Location SUR= Surrounding OS= Out door space SF= Sanitary facilities			IS= Indoor space CR= Class room IE= Indoor equipment HP= Hygiene practices			HF=Hygiene facilities NF=Nutrition facilities PR= Programme AC= Activities conducted				BA= Balance of activities EV= Evaluation TL= Teaching learning materials TM= Teaching methods , style and behavior PM= Physical motor activities						UM=Use of music and movement LA= Language activities CA= Cognitive activities DS=Development of social skills PS= Provision of staff						

APPENDIX J1

SCORES CONVERTED TO GRADES ON EARLY CHILDHOOD SCHOOL

ENVIRONMENT OBSERVATION AND RATING SCALE

Schools	Physical set up	Grade	Health and hygiene	Grade	Conceptual /curricular content	Grade	Obtained Total score	Grade
Total score	88		32		128		248	
PRS.1	37	C	10	C	54	C	101	C
PRS.2	50	B	14	C	57	C	121	C
PRS.3	59	B	15	C	53	C	127	B
PSUS.4	61	B	17	B	62	C	140	B
PSUS.5	29	C	10	C	52	C	91	C
PSUS 6	29	C	10	C	39	C	78	C
PUS.7	56	B	16	C	78	B	150	B
PUS.8	69	A	21	B	90	B	180	B
PUS.9	83	A	29	A	115	A	227	A
GRS.10	46	B	10	C	40	C	96	C
GRS.11	29	C	10	C	40	C	79	C
GRS.12	42	C	10	C	39	C	91	C
GSUS.13	31	C	10	C	37	C	78	C
GSUS.14	54	B	12	C	60	C	126	B
GSUS15	54	B	11	C	56	C	121	C
GUS.16	36	C	10	C	44	C	90	C
GUS. 17	64	B	18	B	77	B	159	B
PUS.18	50	B	11	C	49	C	110	C
Total score	88		32		128		248	

Obtained Grade on Early Childhood School Environment Observation and Rating Scale

Physical set up		Health and hygiene	Conceptual /curricular content	Total
A	2 schools	1 schools	1 schools	1 schools
B	9 schools	3 schools	3 schools	6 schools
C	7 schools	14 schools	14 schools	11 schools
D	0 schools	0 schools	0 schools	0 schools
Total	18	18	18	18

KEY: A = EXCELLENT B = GOOD C = AVERAGE D = POOR

APPENDIX K
RAW SCORES OF DEVELOPMENT ASSESSMENT MEASURE DAM I
(PERFORMANCE AND VERBAL)

Code	Development assessment measure DAM I													
	MSP	FI	VD	CL	NC	VM	TR	AM	IN	VPS	AR	AN	AA	SR
PRSC01	4	4	5	3	2	1	3	2	17	12	0	8	4	15
PRSC02	4	8	6	2	2	2	3	3	18	13	3	13	7	18
PRSC03	4	8	7	3	1	2	2	2	29	14	5	18	9	18
PRSC04	4	8	9	3	1	2	2	3	25	13	4	18	10	18
PRSC05	6	8	8	3	3	5	4	3	27	14	5	18	9	18
PRSC06	6	5	5	3	2	2	2	2	11	9	3	12	7	10
PRSC07	4	8	6	3	1	3	2	2	29	14	3	15	7	14
PRSC08	4	8	7	7	2	4	5	4	22	11	2	15	8	13
PRSC09	11	10	10	8	4	6	6	7	27	13	5	18	8	18
PRSC010	10	9	10	9	4	6	5	7	26	14	10	17	11	16
PRSC011	10	10	11	9	4	6	6	6	24	14	5	16	9	18
PRSC012	12	10	9	10	3	8	6	8	30	16	4	18	12	18
PRSC013	12	10	12	12	4	7	8	7	35	16	12	18	12	18
PRSC014	9	8	11	10	3	7	8	7	27	14	7	15	12	18
PRSC015	9	10	8	9	2	6	6	6	25	12	5	15	4	14
PRSC016	9	9	8	7	1	6	5	6	24	9	2	10	8	13
PRSC017	10	9	7	4	2	3	2	2	27	15	8	17	8	18
PRSC018	9	8	7	3	1	3	2	3	31	15	7	16	11	18
PRSC019	10	7	5	4	0	1	2	2	21	11	5	14	10	16
PRSC020	8	7	6	4	1	2	2	3	23	10	5	12	7	13
PRSC021	10	9	9	4	3	6	5	5	31	15	7	15	11	18
PRSC022	9	8	7	4	1	2	2	2	26	11	3	15	12	16
PRSC023	9	7	4	4	1	1	2	2	22	10	5	14	8	12
PRSC024	10	7	5	4	1	2	2	2	23	15	4	17	8	14
PSUSC025	11	9	12	12	3	8	8	7	30	14	5	16	12	18
PSUSC026	10	7	11	8	3	7	7	5	31	14	3	12	11	15
PSUSC027	11	9	11	11	3	8	8	6	29	14	4	17	12	16

Code	Development assessment measure DAM I													
	MSP	FI	VD	CL	NC	VM	TR	AM	IN	VPS	AR	AN	AA	SR
PSUSC028	10	9	10	10	3	7	7	7	32	15	4	16	11	17
PSUSC029	11	9	10	10	2	8	8	7	28	14	3	16	11	16
PSUSC030	11	8	10	10	3	8	8	6	28	13	3	16	12	15
PSUSC031	10	8	9	10	3	8	8	7	28	13	3	17	11	16
PSUSC032	10	8	10	10	3	7	6	6	26	14	4	16	12	16
PSUSC033	9	10	6	9	3	5	7	6	28	14	6	16	7	14
PSUSC034	7	5	4	5	1	3	2	4	23	11	6	16	9	12
PSUSC035	5	5	4	6	1	2	3	3	16	10	3	12	5	12
PSUSC036	8	10	9	6	4	6	5	6	22	10	4	14	7	14
PSUSC037	8	8	9	8	2	6	6	6	25	14	7	16	11	14
PSUSC038	9	7	9	7	2	4	6	6	25	14	6	15	11	14
PSUSC039	10	7	9	11	3	6	7	7	28	14	7	15	12	16
PSUSC040	9	7	8	8	2	7	5	6	27	12	5	13	11	13
PSUSC041	9	10	6	9	3	5	7	6	28	14	6	16	7	14
PSUSC042	7	5	4	5	1	3	2	4	23	11	6	16	9	12
PSUSC043	5	5	4	6	1	2	3	3	16	10	3	12	5	12
PSUSC044	8	10	9	6	4	6	5	6	22	10	4	14	7	14
PSUSC045	8	8	9	8	2	6	6	6	25	14	7	16	11	14
PSUSC046	9	7	9	7	2	4	6	6	25	14	6	15	11	14
PSUSC047	10	7	9	11	3	6	7	7	28	14	7	15	12	16
PSUSC048	9	7	8	8	2	7	5	6	27	12	5	13	11	13
PUSC049	8	7	8	8	2	6	7	8	31	14	2	16	11	17
PUSC050	7	7	9	8	2	7	6	6	29	13	2	15	10	18
PUSC051	10	8	10	11	2	7	7	8	29	14	2	16	10	15
PUSC052	9	8	8	10	2	6	6	7	26	13	2	16	11	17
PUSC053	10	9	10	8	1	7	6	7	28	13	2	16	10	16
PUSC054	10	9	10	11	1	7	7	7	28	14	2	14	10	16
PUSC055	11	8	10	9	2	6	6	5	20	10	1	16	10	16
PUSC056	12	10	11	12	2	8	6	7	33	15	2	14	10	17

Code	Development assessment measure DAM I													
	MSP	FI	VD	CL	NC	VM	TR	AM	IN	VPS	AR	AN	AA	SR
PUSC057	9	8	9	9	0	5	5	6	23	13	1	13	11	15
PUSC058	8	8	9	8	1	6	7	6	11	14	2	15	12	15
PUSC059	12	19	10	10	4	6	7	6	26	11	5	17	10	15
PUSC060	10	9	8	9	2	7	6	6	27	12	2	16	9	15
PUSC061	9	8	9	8	1	6	6	4	29	13	1	15	10	14
PUSC062	9	9	9	10	1	6	5	6	25	12	1	13	9	13
PUSC063	9	7	8	8	1	6	5	5	27	14	1	11	9	13
PUSC064	9	8	9	9	1	6	5	5	26	14	1	11	7	12
PUSC065	12	10	12	12	5	8	8	8	33	16	10	18	11	17
PUSC066	12	10	12	12	7	8	8	8	34	15	8	18	12	18
PUSC067	12	9	12	12	5	8	8	8	36	16	14	18	12	18
PUSC068	11	10	12	12	3	6	7	8	29	15	6	16	12	18
PUSC069	12	10	12	12	4	6	7	6	30	12	7	16	11	18
PUSC070	12	10	12	12	5	8	8	8	31	16	10	17	11	18
PUSC071	12	10	12	12	6	8	8	8	32	16	10	17	12	18
PUSC072	12	10	12	12	6	7	7	8	31	14	6	16	12	18
GRSC073	6	8	6	6	0	6	6	5	25	9	0	10	9	12
GRSC074	8	6	6	7	0	7	5	5	28	10	1	14	11	12
GRSC075	8	9	10	10	1	6	7	6	25	12	1	18	11	12
GRSC076	10	8	9	8	0	8	8	8	28	12	0	11	12	12
GRSC077	7	7	7	7	0	4	7	6	24	7	0	17	12	15
GRSC078	12	8	6	8	1	4	6	5	18	11	0	10	6	18
GRSC079	6	5	6	6	0	6	6	6	26	7	0	7	11	15
GRSC080	9	7	12	9	2	6	7	6	33	16	6	18	12	14
GRSC081	11	9	10	11	2	8	7	7	31	14	1	16	12	16
GRSC082	10	8	11	11	3	7	7	7	32	14	2	17	12	15
GRSC083	10	8	10	11	4	3	3	3	22	14	4	18	7	16
GRSC084	9	9	11	10	2	8	8	7	32	16	1	16	12	16
GRSC085	6	5	8	6	1	7	6	5	20	16	2	18	12	15

Code	Development assessment measure DAM I													
	MSP	FI	VD	CL	NC	VM	TR	AM	IN	VPS	AR	AN	AA	SR
GRSC086	11	10	12	6	2	7	7	7	30	14	3	18	12	16
GRSC087	9	10	10	10	3	7	7	8	32	16	2	18	12	15
GRSC088	8	8	9	9	4	6	7	6	36	16	3	13	12	15
GRSC089	8	5	5	7	0	4	3	3	15	6	0	7	9	11
GRSC090	8	5	6	6	0	6	5	6	24	9	0	14	7	11
GRSC091	8	6	7	6	0	2	4	3	18	7	0	6	10	11
GRSC092	10	9	10	10	3	8	7	6	31	13	2	15	12	16
GRSC093	11	9	10	11	4	8	7	7	32	14	4	17	11	17
GRSC094	12	10	11	11	3	8	7	8	34	13	3	15	12	18
GRSC095	10	8	10	10	2	7	6	6	30	13	3	15	11	17
GRSC096	12	9	10	10	3	8	7	7	31	14	3	16	12	17
GSUSC097	10	8	11	10	3	8	7	7	31	14	2	15	10	16
GSUSC098	9	9	11	10	2	6	5	7	32	14	3	16	10	15
GSUSC099	11	9	10	10	2	7	6	6	31	13	2	16	12	18
GSUSC0100	9	8	10	9	3	7	6	6	31	16	3	16	12	15
GSUSC0101	10	9	10	10	3	6	8	8	31	16	3	16	12	16
GSUSC0102	11	9	10	12	1	7	8	7	29	16	4	18	12	16
GSUSC0103	10	10	8	10	3	7	7	6	30	15	2	16	12	15
GSUSC0104	9	9	10	11	1	7	7	6	24	15	1	18	10	15
GSUSC0105	9	10	10	12	3	7	7	7	34	13	4	18	12	16
GSUSC0106	10	10	9	10	2	4	6	6	19	10	2	15	12	15
GSUSC0107	12	9	10	10	2	6	6	7	20	10	0	12	16	15
GSUSC0108	11	10	11	10	2	8	8	8	36	16	3	18	12	15
GSUSC0109	10	8	10	10	3	8	8	7	18	14	2	14	10	15
GSUSC0110	10	8	10	11	3	8	8	8	33	15	2	15	12	16
GSUSC0111	11	9	10	10	3	8	7	8	32	13	3	18	11	17
GSUSC0112	12	11	12	12	4	8	8	8	36	14	5	18	12	18
GSUSC0113	8	7	7	6	1	3	4	5	22	10	5	14	9	13
GSUSC0114	10	8	9	8	3	5	6	7	21	9	1	9	9	14

Code	Development assessment measure DAM I													
	MSP	FI	VD	CL	NC	VM	TR	AM	IN	VPS	AR	AN	AA	SR
GSUSC0115	6	6	6	9	1	4	4	4	19	7	1	10	10	12
GSUSC0116	8	6	6	7	1	3	3	5	32	11	3	16	12	16
GSUSC0117	10	6	10	7	2	5	6	6	23	12	2	16	11	16
GSUSC0118	10	7	8	8	3	5	7	6	24	13	4	17	11	14
GSUSC0119	8	6	8	8	2	6	6	6	24	14	2	16	11	13
GSUSC0120	9	7	8	7	0	6	5	4	24	12	3	13	11	13
GUSC0121	8	8	9	8	3	5	6	7	30	12	3	14	7	18
GUSC0122	9	7	6	7	2	4	4	6	24	12	2	13	11	15
GUSC0123	9	7	8	6	2	6	4	5	22	12	2	14	9	14
GUSC0124	8	6	7	6	2	5	5	6	25	10	2	17	9	15
GUSC0125	10	7	6	4	2	2	2	2	23	10	3	13	6	12
GUSC0126	10	7	7	4	1	2	2	3	24	10	3	13	9	14
GUSC0127	10	9	8	7	4	4	5	6	25	11	4	15	9	14
GUSC0128	10	9	7	4	2	3	2	2	26	11	4	15	9	14
GUSC0129	11	8	12	10	2	7	6	7	28	15	2	17	12	15
GUSC0130	10	9	10	10	1	8	6	7	29	14	2	16	12	15
GUSC0131	10	8	10	9	2	7	7	7	30	14	2	18	12	14
GUSC0132	9	8	9	10	3	7	4	4	27	13	2	16	11	15
GUSC0133	11	9	10	11	2	8	8	8	35	15	3	17	12	18
GUSC0134	11	9	10	10	2	7	6	7	31	14	2	17	12	16
GUSC0135	11	8	10	11	2	7	7	8	29	13	2	16	11	16
GUSC0136	9	5	10	10	3	8	7	8	31	13	3	17	11	15
GUSC0137	8	9	6	7	1	4	4	4	18	13	3	17	10	14
GUSC0138	8	7	8	8	1	7	6	6	23	13	3	15	10	12
GUSC0139	8	7	9	10	3	5	6	5	27	14	3	15	10	14
GUSC0140	9	7	10	8	2	7	6	5	26	14	3	16	10	14
GUSC0141	10	7	8	8	2	8	8	7	26	13	2	16	11	15
GUSC0142	8	7	8	10	2	7	5	7	27	14	3	16	11	16
GUSC0143	9	8	8	8	2	6	7	7	29	14	3	17	11	15

Code	Development assessment measure DAM I													
	MSP	FI	VD	CL	NC	VM	TR	AM	IN	VPS	AR	AN	AA	SR
GUSC0144	9	8	8	10	2	7	8	7	27	16	2	16	11	14
NSGC0145	10	8	8	8	1	6	6	6	22	12	2	12	10	14
NSGC0146	9	7	6	7	1	6	6	5	20	12	1	11	11	12
NSGC0147	6	6	6	6	0	5	6	5	22	12	2	10	10	14
NSGC0148	8	6	6	5	1	6	6	5	22	13	1	10	10	14
NSGC0149	9	7	5	5	1	5	6	5	21	14	2	11	9	15
NSGC0150	7	5	5	6	1	4	6	5	23	12	2	12	9	12
NSGC0151	6	5	5	6	0	6	6	6	22	12	0	12	9	12
NSGC0152	10	8	8	8	1	6	6	6	22	12	2	12	10	14
NSGC0153	9	7	6	7	1	6	6	5	20	12	1	11	11	12
NSGC0154	6	6	6	6	0	5	6	5	22	12	2	10	10	14
NSGC0155	8	6	6	5	1	6	6	5	22	13	1	10	10	14
NSGC0156	9	7	5	5	1	5	6	5	21	14	2	11	9	15
NSGC0157	7	5	8	6	1	4	6	5	23	12	2	12	9	12
NSGC0158	6	5	6	6	0	6	6	6	22	12	0	12	9	12
NSGC0159	10	8	6	8	1	6	6	6	22	12	2	12	10	14
NSGC0160	9	7	5	7	1	6	6	5	20	12	1	11	11	12
NSGC0161	6	6	5	6	0	5	6	5	22	12	2	10	10	14
NSGC0162	8	6	5	5	1	6	6	5	22	13	1	10	10	14
NSGC0163	9	7	8	5	1	5	6	5	21	14	2	11	9	15
NSGC0164	7	5	6	6	1	4	6	5	23	12	2	12	9	12
NSGC0165	6	5	6	6	0	6	6	6	22	12	0	12	9	12
NSGC0166	10	8	6	8	1	6	6	6	22	12	2	12	10	14
NSGC0167	9	7	5	7	1	6	6	5	20	12	1	11	11	12
NSGC0168	6	6	5	6	0	5	6	5	22	12	2	10	10	14
NSGC0169	8	6	5	5	1	6	6	5	22	13	1	10	10	14
NSGC0170	9	7	6	5	1	5	6	5	21	14	2	11	9	15
NSGC0171	7	5	5	6	1	4	6	5	23	12	2	12	9	12
NSGC0172	6	5	6	6	0	6	6	6	21	12	0	12	9	12

Code	Development assessment measure DAM I													
	MSP	FI	VD	CL	NC	VM	TR	AM	IN	VPS	AR	AN	AA	SR
NSGC0173	6	5	6	4	1	5	5	5	20	11	2	9	9	14
NSGC0174	6	5	5	7	1	5	5	5	16	14	1	6	6	10
NSGC0175	6	6	5	6	0	5	6	5	21	12	2	10	10	14
NSGC0176	8	6	4	5	1	6	6	5	22	13	1	10	10	14
NSGC0177	9	7	9	5	1	5	6	5	20	12	2	11	9	15
NSGC0178	7	5	6	6	1	4	6	5	23	12	2	12	9	12
NSGC0179	6	4	6	4	0	4	4	4	18	9	0	5	5	12
NSGC0180	10	8	6	8	1	6	6	6	22	13	2	12	11	14
NSGC0181	9	7	5	7	1	6	6	5	20	12	1	11	11	12
NSGC0182	6	6	6	6	0	5	6	5	22	12	2	10	10	14
NSGC0183	8	6	5	5	1	6	6	6	22	13	1	12	10	14
NSGC0184	9	7	7	5	1	5	6	5	21	14	2	11	9	15
NSGC0185	7	5	5	6	1	6	6	7	23	12	2	12	11	12
NSGC0186	6	5	6	6	0	6	6	6	22	12	0	12	9	12
NSGC0187	10	8	7	6	1	5	4	4	20	12	2	12	10	14
NSGC0188	7	5	5	4	1	4	4	4	17	7	1	7	6	9
NSGC0189	6	6	6	6	1	5	6	5	22	13	2	11	10	14
NSGC0190	8	6	7	5	1	6	7	5	22	13	1	10	10	14
NSGC0191	9	7	5	5	1	5	6	5	21	14	2	11	9	15
NSGC0192	7	5	5	6	1	5	6	6	23	12	2	12	9	12
NSGC0193	6	5	5	6	0	6	6	6	22	12	0	12	9	12
NSGC0194	10	8	8	8	1	6	6	6	22	12	2	12	10	14
NSGC0195	9	7	6	6	1	5	5	5	20	12	1	9	9	12
NSGC0196	6	6	6	6	0	5	6	5	22	12	2	10	10	14
NSGC0197	8	6	6	5	1	6	6	5	22	13	1	10	10	14
NSGC0198	9	7	5	5	1	5	6	5	21	14	2	11	9	15
NSGC0199	6	5	4	4	1	4	4	5	18	9	2	9	9	9
NSGC0200	6	5	5	4	0	4	4	4	17	7	0	7	7	7

APPENDIX K1

DEVELOPMENT ASSESSMENT MEASURE (DAM II+ TRS)

Children's			DAM II		
Score	TRS	PMD	FMD	SED	SHS
		96	48	69	81
PRSC01	36	78	16	54	67
PRSC02	43	82	20	57	72
PRSC03	33	59	21	60	72
PRSC04	28	79	20	58	71
PRSC05	41	82	19	58	71
PRSC06	18	75	20	60	72
PRSC07	35	74	20	59	73
PRSC08	32	79	22	58	72
PRSC09	48	71	15	54	67
PRSC010	52	72	18	57	72
PRSC011	49	79	21	60	72
PRSC012	60	61	22	58	71
PRSC013	60	82	20	58	71
PRSC014	56	75	21	60	72
PRSC015	42	64	16	59	73
PRSC016	49	79	20	58	72
PRSC017	44	71	18	54	67
PRSC018	34	67	14	57	72
PRSC019	51	79	20	60	72
PRSC020	45	69	21	58	71
PRSC021	55	72	23	58	71
PRSC022	54	75	20	60	72
PRSC023	44	81	16	59	73
PRSC024	49	70	21	58	72
PSUSC025	49	71	21	54	67
PSUSC026	51	82	18	57	72
PSUSC027	54	79	20	60	72
PSUSC028	54	79	21	58	71
PSUSC029	58	72	26	58	71
PSUSC030	54	75	21	60	72
PSUSC031	45	81	20	59	73
PSUSC032	38	79	15	58	72
PSUSC033	40	71	16	54	67
PSUSC034	43	70	20	57	72

Children's			DAM II		
Score	TRS	PMD	FMD	SED	SHS
PSUSC035	31	79	23	60	72
PSUSC036	49	79	22	58	71
PSUSC037	45	82	23	58	71
PSUSC038	55	75	21	60	72
PSUSC039	46	81	20	59	73
PSUSC040	47	70	20	58	72
PSUSC041	40	71	18	54	67
PSUSC042	43	68	20	57	72
PSUSC043	31	79	20	60	72
PSUSC044	49	79	20	58	71
PSUSC045	45	82	23	58	71
PSUSC046	55	75	20	60	72
PSUSC047	46	81	26	59	73
PSUSC048	47	66	20	58	72
PUSC049	57	71	23	54	67
PUSC050	46	82	23	57	72
PUSC051	60	79	34	60	72
PUSC052	52	79	23	58	71
PUSC053	55	62	34	58	71
PUSC054	56	75	26	60	72
PUSC055	45	81	31	59	73
PUSC056	55	69	32	58	72
PUSC057	42	71	32	54	67
PUSC058	45	82	32	57	72
PUSC059	50	79	36	60	72
PUSC060	37	79	30	58	71
PUSC061	39	82	31	58	71
PUSC062	40	75	34	60	72
PUSC063	46	71	32	59	73
PUSC064	43	65	35	58	72
PUSC065	48	61	46	64	53
PUSC066	56	67	38	66	54
PUSC067	54	62	47	66	53
PUSC068	46	67	45	66	48
PUSC069	54	63	41	64	54
PUSC070	45	67	47	66	53
PUSC071	51	64	40	66	52
PUSC072	49	74	47	65	54
GRSC073	51	74	19	54	66

Children's			DAM II		
Score	TRS	PMD	FMD	SED	SHS
GRSC074	51	83	22	57	77
GRSC075	60	81	21	60	71
GRSC076	45	61	16	58	70
GRSC077	44	83	20	58	70
GRSC078	47	77	17	60	71
GRSC079	48	82	18	59	72
GRSC080	47	80	19	58	72
GRSC081	37	74	20	51	67
GRSC082	58	61	22	52	66
GRSC083	39	59	20	51	66
GRSC084	60	63	20	61	67
GRSC085	35	61	22	55	66
GRSC086	60	88	20	59	66
GRSC087	44	71	20	64	67
GRSC088	57	88	21	63	67
GRSC089	38	79	18	69	72
GRSC090	25	83	16	55	75
GRSC091	32	61	18	57	76
GRSC092	40	81	20	57	76
GRSC093	49	73	21	56	76
GRSC094	55	88	22	59	75
GRSC095	54	77	20	60	77
GRSC096	53	89	22	60	77
GSUSC097	33	72	15	47	72
GSUSC098	33	81	16	48	72
GSUSC099	27	73	21	48	71
GSUSC0100	47	84	20	46	72
GSUSC0101	31	86	18	46	72
GSUSC0102	53	86	17	48	72
GSUSC0103	40	87	21	44	73
GSUSC0104	33	85	20	46	72
GSUSC0105	50	96	23	68	71
GSUSC0106	44	66	22	68	78
GSUSC0107	26	93	21	66	71
GSUSC0108	45	64	22	60	75
GSUSC0109	36	96	20	68	78
GSUSC0110	35	96	19	62	68
GSUSC0111	50	94	22	68	63
GSUSC0112	30	93	23	68	70

Children's			DAM II		
Score	TRS	PMD	FMD	SED	SHS
GSUSC0113	47	64	23	58	70
GSUSC0114	42	55	23	58	70
GSUSC0115	51	55	25	58	71
GSUSC0116	47	56	26	58	71
GSUSC0117	43	62	26	58	71
GSUSC0118	54	68	24	59	70
GSUSC0119	48	67	24	58	71
GSUSC0120	43	61	25	57	71
GUSC0121	49	67	20	58	70
GUSC0122	18	62	22	58	69
GUSC0123	25	72	20	62	72
GUSC0124	51	80	20	63	72
GUSC0125	51	80	22	62	72
GUSC0126	44	60	22	62	73
GUSC0127	44	70	21	62	73
GUSC0128	27	70	18	62	72
GUSC0129	50	91	18	55	72
GUSC0130	49	71	22	57	75
GUSC0131	60	69	22	57	76
GUSC0132	53	91	20	57	76
GUSC0133	52	88	25	56	76
GUSC0134	42	91	24	59	75
GUSC0135	49	68	23	60	77
GUSC0136	48	71	32	60	77
GUSC0137	39	82	19	60	72
GUSC0138	52	81	18	62	72
GUSC0139	40	73	21	62	71
GUSC0140	34	84	18	59	72
GUSC0141	59	86	19	60	72
GUSC0142	56	66	20	63	72
GUSC0143	48	64	18	57	73
GUSC0144	48	65	20	59	72
NSGC0145	33	79	19	35	36
NSGC0146	31	67	19	31	36
NSGC0147	24	82	18	32	31
NSGC0148	24	66	18	29	30
NSGC0149	23	68	18	32	34
NSGC0150	24	89	15	28	32
NSGC0151	23	64	17	32	34

Children's			DAM II		
Score	TRS	PMD	FMD	SED	SHS
NSGC0152	24	72	14	32	32
NSGC0153	24	71	17	21	34
NSGC0154	24	80	17	32	30
NSGC0155	23	70	17	32	32
NSGC0156	23	65	18	32	31
NSGC0157	22	64	18	32	32
NSGC0158	22	81	18	32	30
NSGC0159	30	89	18	34	37
NSGC0160	32	75	19	33	35
NSGC0161	29	83	18	32	36
NSGC0162	24	75	14	27	29
NSGC0163	33	69	21	32	32
NSGC0164	31	85	19	35	31
NSGC0165	23	73	17	32	32
NSGC0166	24	74	17	28	32
NSGC0167	24	77	18	32	30
NSGC0168	23	78	18	32	32
NSGC0169	23	87	18	26	34
NSGC0170	23	76	15	32	32
NSGC0171	24	86	17	27	30
NSGC0172	23	78	14	31	33
NSGC0173	23	84	17	32	32
NSGC0174	23	79	17	28	35
NSGC0175	24	80	17	32	32
NSGC0176	23	74	18	32	34
NSGC0177	23	76	18	32	33
NSGC0178	23	79	18	29	32
NSGC0179	24	83	15	32	32
NSGC0180	23	86	17	30	34
NSGC0181	23	84	14	32	32
NSGC0182	23	63	17	32	32
NSGC0183	24	63	16	27	32
NSGC0184	22	76	17	32	30
NSGC0185	22	79	15	30	32
NSGC0186	21	78	17	32	32
NSGC0187	23	76	17	25	32
NSGC0188	22	79	14	31	30
NSGC0189	22	70	17	32	32
NSGC0190	23	75	15	31	32

Children's			DAM II		
Score	TRS	PMD	FMD	SED	SHS
NSGC0191	17	73	17	32	32
NSGC0192	24	78	18	33	32
NSGC0193	26	81	15	32	32
NSGC0194	25	72	18	35	36
NSGC0195	31	82	15	30	32
NSGC0196	30	70	17	32	31
NSGC0197	31	61	14	35	29
NSGC0198	32	70	17	28	28
NSGC0199	27	70	16	32	32
NSGC0200	23	65	17	27	33