CHANGING PERCEPTION

Study on Impact of ECD in Primary Education in Nepal

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Executive summary

Nepal introduced Montessori, Kindergarten, and pre-school programmes in 1949 prior to implementing Early Childhood Development (ECD) in 1949. Then, in 1979 Seto Gurans National Child Development Services initiated its exploration of the ECD interventions in remote locations and the marginalized populations in rural Nepal. This initiative provided the legitimate basis of a foundation to implement ECD as a national priority programme. After the implementation of Education for All (EFA) commitment, the Ministry of Education (MoE) established an ECD Section that paved the way for institutionalizing the ECD model across the country. Since its initial implementation, there has been a steady increase in the number of ECD across the country. Currently, there are 20023 School Based Early Childhood Development (SBECD) and Community Based Early Childhood Development CBECD centers (DOE, 2008). In addition, there are numerous examples of Montessori and Kindergarten schools at the private level and alternative ECD in the public as well as community level. These numbers indicate a strong investment in ECD at various levels of Nepali Education stakeholders.

The objectives of this study are to (a) analyze the effect ECD has on the learning achievements of children in primary education (b) assess the enrollment and retention (and drop out) rates of children at the in Primary level, and (c) assess the parents, teachers, and community perception on ECD program. In order to achieve these objectives, the study focused on the impact of publicly run SBECD and CBECD programs.

The study team collected quantitative data from achievement tests and the school records. It also generated qualitative information through observation, and focus group discussions. To enrich the investigative process described, numerous debriefing sessions were held in conjunction with scrutinizing reflection over the various stages of information. The data were the means to Triangulation, which was achieved by employing a multi-method approach and by generating data through various sources and channels. An advisory team and the ECD networking contributed to enhancing the quality of this research from the early stage to the finalization of the report and equipped the study with their feedbacks for tools development to the finalization of the report.

The study team visited 9 SBECD and 14 CBECD from four districts namely, Jumla, Surkhet, Baglung, and Mahottari.

Major findings of the study are as follows:

As the team found, ECD graduates, regardless of their origin, exhibit better performance in learning than their non-ECD counterparts. The study shows that ECD children were encouraged to follow the learning process while the non-ECD children were accustomed to following the product approach to learning.

The study also found that SBECD could enroll more children in school than their CBECD counterparts, which is a challenge to its advocators and the promoters. Regarding the retention of the students the study team found that Baglung had more dropouts than other districts. Finally, we found that all the stakeholders of education valued ECD, but each sector of the community holds their own independent perception of its role. For instance, poor parents perceived it as an alternative to the private boarding school; boarding school thought it as a venue to discipline the children; teachers perceived ECD as a place to provide prerequisite knowledge, attitude, and skills to their potential grade 1 enrollees; facilitators

found this program as part-time job to some, outing scheme for others, and a ladder to go for teaching job.

On the basis of the above findings, the study team came up with a number of recommendations. The major recommendations are as follows:

1. Since ECD could satisfy different stakeholders of education, the study recommends that there should be wide ranges of national discussions at the local government level. The local government, lead school, or the ECD promoters could coordinate such dissemination discourse sessions. Following such discourse sessions ECD programs should be made available to the needy groups of the people through both demand and supply based approaches.
2. The study recommends enabling CBECD to enroll more children in school. For this the current process of not linking CBECD to school should be revised to ensure all CBECD graduates' in school. In addition, we suggest for that school's and CBECD update their record keeping system, to better track student's enrollment and retention status.

In order to accommodate stakeholders' perception of what impact that ECD has on a child's ability, we recommend the following:

a) basic research to be done by the ECD facilitators and the schoolteachers
b) development of both self taught and media taught basic and refresher training programs
c) preparation of a self reported supervision system
d) initiation of a community level ECD graduates' club
e) development of volunteer facilitators and supervisors
f) periodic exchange sessions between the school teachers and the SBECD facilitators
g) introduction of a ECD facilitators' support network, that includes: a media based open education program, scholarship for formal education, cost-saving scheme
h) media and listeners club, to serve as a parental education program
i) local government level reward system for the ECD promoters, whether they are the facilitators or the management committee members
j) regular sharing between the SBECD facilitators' knowledge, skills, and experience with the teachers and vice versa at the school level (l) periodic sharing session of the ECD parents non-ECD parents about the performance of their children including that of the CBECD's and SBECDs (m) smooth transition program to the ECD children of all grades

Both quantitative and qualitative data show that the ECD program is essential for children's learning. The outcome of ECD program is hugely at quantity i.e., increase in number of ECD centers and children but moderate at quality level i.e., learning environment, ECD facilitators skills, usage of learning material. Investment in ECD is very low (i.e. 6% of EFA) which should be increased as the ECD expansion is committed till 2015, to (55,000-60,000) ECD centers. This funding only ensures quantity not the quality. In order to ensure the quality intervention of ECD in Nepalese children recognizable investment further is essential

Education has become a widely discussed topic in the media, however the focus has neglected the role of ECD. As such, the study recommends advocating ECD through media intervention.

CHAPTER - I
Introduction

Nepal is a land lock country with the area of 147181 square kilometer. The total population of the country is 27,500,000 where 40 ethnic groups live together and speak 70 languages. It is a democratic republic country. It is internationally accepted that early childhood education begins at conception till the child reaches 8 years old. But in Nepal's ,current focus is aimed at children under five, with the emphasis on children to develop physical, social, emotional and cognitive aspects, which covers the holistic development of children (ECD Program operation Directives, 2004). This age is regarded as critical in a sense that the brain grows to about 80% of adults' size by 3 years of age and 90% by the age of 5. This rapid growth is largely attributed to the changes that occur within individual neurons, which are structured much like trees (www.zerotothree.org, 2008). To develop full potential of these brain cells, experiences, interactions, verbal communication are necessary to develop connections between neurons. Cognitive, social, physical and emotional domains needs to be nurtured through personal development, character formation, socialization, establishing learning patterns, and language development in a balanced way. In doing so, one should be aware of the fact that every child is different and unique from each other as s/he is governed by hereditary traits and characteristics. But the concern of the ECD practitioners is to harness the role of environment and the opportunities a child receives for his/her holistic personality development.

Education for all (EFA) has targeted 80% of the children to get ECD experiences before they enroll in primary school. For this Ministry of Education (MOE) have developed strategies to establish 55000 ECD centers across the country by 2015. So far 20,023 ECD centers have been established through including community based and school based centers approaches. Through these centers 0.8 million children receive ECD opportunity (DOE, 2007).

Primary education, especially grade 1, is the gateway to formal education because children both from ECD and non-ECD backgrounds get enrolled. Statistics shows that in the year 2008/9, 881,247 children were enrolled in 23,695 ECD/PPC (Flash report, 2008/9). The same source says that out of these children 377,958 or,36.2% were enrolled in grade 1 with ECD/PPC experience out of total 1043938 enrolled. (Flash I report, 2008/9).

ECD by design helps children learn in child-friendly environment through play songs, poems, stories and other creative activities. The way of teaching in grade 1 differs in some ways. This educational transition is a process that takes child from one phase of education to another over time (Fabian & Dunlop, 2002). Changes of relationship, teaching style, environment, space, time, contexts for learning, and learning itself, combine at moments of transition making intense and accelerated demands (Fabian & Dunlop, 2005). As the child reaches first grade, educational philosophy, teaching style and structure of primary education often vary from those exemplified in the nursery experience. Recognizing that children can find it difficult to cope with such changes, many schools have made efforts to smooth the entry to school by preparing both children and their families for the differences they will meet (Fabion & Dunlop, 2002). This difficulty can cause worry and stress leading to aggression, fatigue or withdrawal, all of which have the potential to impair learning capacity (Featherstone, 2004). Here the children can become disaffected, disoriented, and inhibited (Fisher, 1996) resulting in behavioral problems which affect their commitment, motivation, and relationships (Kienig, 2002). In addition, children find the changes of environment, resources, curriculum, institutional culture, pedagogical approaches, and styles of classroom

interaction all factors that can potentially impact on how they respond during the first major educational transition. Moreover, their learning can also be affected by various factors like age, gender, economy, socio-cultural, geography etc.
Given the wide scope of possible adversative factors children face, the question is: how do we best prepare them for this transition? In response, Jean Piaget a renowned child development psychologist, suggests a model in which children's ognitive development through non-intervened free play (www.childdevelopmentinfo.com, 2008) while Lev Vygotsky advocated for dialectical process whereby a child learns through problem – solving and experience sharing usually with parents, teacher and sometimes with their siblings and/or peers (www.funderstanding.com, 2008).

Rationale for the study

The total ECD population is 1,367,755 (3-4 year olds), in the country, out of which 40 percent of the populations are still deprived of ECD facilities (DOE, 2007). These children who do not have access to ECD are still to be enrolled in the ECD program prior to go to school. Thus, there are two categories of children at the time of enrollment in grade 1: those who attended to ECD and those who did not have access. Naturally, this study is interested with comparing the respective holistic development of the students depending on their enrollment in ECD prior to grade 1.
Studies done so far by (Save the Children US, Impact study, 2003) do claim that ECD helps reduce drop out and grade repetition in primary education. 33.1 percent of the children receive ECD experience in grade 1(Flash report 2064).The inverse correlation between enrollment in ECD and dropout rates, the focus of this study is to figure out different ways to expand ECD initiatives.

The DOE record of 2007 shows 138.5 percent gross enrollment rate in primary school. This signifies that there are both the underage and overage children overcrowding grade 1. Here, the issue is how could we expand ECD programs to improve the situation of the overage and underage children in one classroom. Schools aim to find out the underlying causes that hinder the smooth operation of EFA that detract from the intended result. In order to find out the answer of this question this research was conducted.
The other factor worth noting is the investment made in ECD which is 487.5 million, only 6% of EFA budget (MOE 2008). This budget is a bridge building between the home and school, thus it is important to explore how has this bridge been effective to link between the two.

With the above questions, concerns, and queries in mind, this study is designed to assess the impact efforts in primary education in terms of our expectation and children's cognitive achievements. Apart from it, this study is also conducted to assess the tendency of retention and repetition of students at primary level having ECD and non-ECD background.

Objective of the Study

1. To find out the effect of the ECD intervention in the learning achievement of children in primary education.
2. To assess the enrollment and retention, and drop out of children in Primary level.
3. To assess the parents, teachers, and community's perception on ECD program.

Research Questions

Overarching Question:
How have ECD interventions contributed to ensuring children's equitable access to quality education in primary schools?

Subsidiary questions:

1. How does ECD intervention help to foster cognitive ability of a child in primary level?
2. What is the parent's perception on learning achievement of their child in primary level?

3. What is the teacher's perception on students from ECD and non-ECD background?
4. What is the community perception on ECD program?
5. Does ECD contribute in increasing enrollment and retention rate and reducing drop out rate in primary level?

Delimitations
For technical reasons, this study was delimited to uncover the cognitive aspects of the learning achievement of the ECD and non-ECD children. Beside this, this study concentrates on unveiled the enrollment/ retention and dropout rates of both the ECD and non-ECD students info primary grades.

CHAPTER - II
Literature Review

Theoretical Considerations and their Underpinnings

Cognitive development is about the process of thinking, organizing information and learning abstract concepts. It consists of memory, perception and concentration/attention. Jean Piaget focuses on four cognitive stages of learning (Tassoni & Beith, 2000):

a. 1st stage - 0-2 years - sensory motor stage.
b. 2nd stage 2-6/7 years - pre operational stage
c. 3rd stage - 7-11 years - concrete operation stage
d. 4th stage- 11- 18 +years- formal operation stage

Despite the four stages of maturity articulated by Piaget, it is believed that adult intervention is no use until children are biologically fit for such interactions. However, Lev Vygotsky, Piaget's Russian contemporary and reputable social cognitivist, believes that interaction, regardless of a child's maturity will result in more knowledge absorption by the child. On behalf of his finding's on the role of language in cognitive development of the child (www.funderstanding.com), he argues that there is always the potential of child that needs to be discovered by people around them to which he called the "Zone of Proximal development". He suggested scaffolding for this kind of children's learning. His processes of scaffolding are:

- Build interest and engage the learner
- Encourage the learner's active participation and make the given task simplified by breaking it into smaller sub task
- Keep the learning focused, concentrating on the most important ideas of the assignment
- Refrain the learner from becoming frustrated
- Find out different ways of teacher modeling for completing tasks, which the learners can then imitate and eventually eternalize

The above discussion shows that ECD age children ideally demand systematic intervention appropriate for their chronological and mental age. They also need scaffolding to learn through free play. But the teaching-learning environment usually differs from ECD center to grade 1. This transition is often seen as an ecological concept comprising an interlocking set of systems of home, nursery and school through which children travel in their early years of education. Changes in environment, resources, curriculum, institutional culture, pedagogical approaches and styles of classroom interaction, all have potential to impact how children respond during their first major educational transition. For them, starting school means having to learn the social rules and values of the organization as well as coming to terms with changes in identity, roles and relationships as children become a 'school pupil' on entry to school with different expectations placed on them. It means there is a greater gap between the culture of the school and the culture of the early years nursery setting or home. Studies by (Brooker, 2002) shows that the greater challenges to the child invites greater risk to them for not being able to comply with understanding the requests of the teacher. Again the change of relationships, teaching style, environment, space, time contexts for learning and learning itself, combined in moments of transition make intense and accelerated demands for them. It can also bring the excitement of new beginnings, the anticipation of meeting new people and making new friends and the opportunity to learn new things.

Keeping the above ECD's theoretical underpinnings, now the previous studies done in this area are reviewed. The purpose of this review is to situate this study and see its connection with the earlier studies.

Review of the Previous studies

There are few studies conducted on the impact of ECD in primary education. Among them, Save the Children has conducted an ECD impact study, "What's the Difference?" in 2003. It was conducted in the Siraha district, eastern Terai region, focused on38 ECD centers within their project intervention and 32 government run schools. Both qualitative and quantitative methods were used for data collection. Basically, the entire study can be divided in two broader dimensions: First, a children's response to school and the other the parents perspectives and participation. The first dimension of the study deals with 5 components: starting school, school readiness, and attendance, success in the yearend examination and promotion, repetition and drop-out rates.

The study shows that at least 95% of the ECD children start school at the age of 6 years and 20% more ECD children enroll in school compared to non -ECD children. Also the girl's participation was seen almost equal to boy's. Also, 95% of the dalit children enroll in school, which is slightly higher than their non-dalits peers.

In terms of school readiness, the study shows that ECD children are more academically and socially prepared for school compared to non-ECD children. Citing teachers' references, the study states that attendance and retention of ECD children is higher compared to non- ECD children. Similarly, 81% of the ECD student pass the grade 1 examination at the end of the year which is higher that that of non- ECD children i.e., 61%.

The study also shows that promotion drop out rate of ECD children is less than that of national average while repetition rate of ECD children is lower than that of non ECD children.

The next study called A Study on Development of an ECD situation analysis was conducted by Foundation for Human Development on behalf of Department of Education in the year 2008. Observations, consultation with clients, focused group discussions, interviews and discussions were the methods used for the study. This study mainly focused on policies and strategies, physical facilities, health nutrition, learning materials and activities, management of ECD centers, mobilization of financial resources, impact of ECD program, qualification, training and performance of ECD facilitators, monitoring and supervision of ECD centre, community, parents and stakeholders ownership.

The study was broadly conducted across a various aspects of ECD, but did attempt to assess the impact of ECD. The study was conducted on five districts covering 47 ECD centers out of which 19 communities based and 28 school based ECD centers.

The study shows that children who have ECD experience go to school more often, and their retention is also higher compared to non-ECD children. Also, socially and academically ECD children are more competent than their non -ECD peers in grade 1.

The other dimension of the study on parents and community perception is very encouraging. The study shows that parents who participate in ECD program show more concern about their education of their children. Increased parent participation has led to a positive effect on school participation too.

Finally, the study has covered the impact of the project intervention, which is in-depth but not specific to children learning.

Keeping all the earlier studies in mind we realized the objectives of our work going forward posed questions that remained unanswered. Given the gap in necessary information, we undertook this study.

The above two studies, are concentrated on school outcome based only on school records of children attending ECD services and not attending ECD services. Therefore, this study has tried to unfold the qualitative and quantitative achievement of children through primary sources.

Definition and Meaning of the terms

The terms below are used to carry the following definitions and meanings for this study purpose.

Dropout rate

In this study the word dropout rate indicates the students who enroll in grade 1 in the beginning of the school year and leave the school without completing the grade or the primary level.

Enrollment rate

Total number of students enrolled at the beginning of the academic year.

Attendance rate

Total number of days present in the school. Actual number of days is multiplied by number of students is divided by standard days which is multiplied by number of students.

$$\text{Attendance rate} = \frac{\text{Actual days} * \text{no. of students}}{\text{Standard days} * \text{no of students}} * 100$$

CHAPTER- III
Research Methodology

3.1 Research Design

The study was designed to examine the effects that ECD exposure had on a child's subsequent learning achievements in primary school. Given the study's particular interest in ECD exposure to a child's learning achievement, it should be noted that achievement is often influenced by different variables: viz., sex, age, economy, and geography. Understanding that the environmental context into which the child is born plays a crucial role in shaping his or her development, broader social and political influences on the family can also be considered. For example, the family's capacity to provide for the developing child's needs strongly influences the possibilities open to that individual (. Recent research has shown that poverty and other disadvantage have a major impact on the lives of children in many ways, both directly and indirectly. A large body of public health research has revealed that almost all indices of health, whether physical,emotional, or psychological, are negatively associated with socio-economic disadvantage
(Marmot, as cited in Celia Godfrey, 2006) Though, the other factors have influential role in early learning experiences, the study concentrates only on the school outcome of children irrespective to theor socio- economic background. In order to find out achievement of children the study used qualitative and quantitative approaches. Quantitative tools were used to gathered secondary information to find out the academic outcome of children from the school records maintained by primary schools through school administered test annually. Observation method was conducted and finally the data's were quantified at the end to verify the result with school administered test . The study also used qualitative methods by using qualitative information generated from focused group discussion with parents and community and district level discussions with various stakeholders of ECD.This mixed approach to doing research helped us to triangulate the information that was obtained from different sources.
The study was focused on grade 3 students learning achievement to find out the long-term impact rather than immediate outcome of ECD exposure. Children in grade-3 belong to age category 7-11 years, so that the study could figure out the lasting effect rather that immediate effect.

Research Methods

The following methods tools were used to gather and generate data as well as information.

1. **Observation**: This study used close observation to find out Jean Piaget's four cognitive stages of development of the child. Children between 7-11 years were selected as participant. Through this observation the study observed children's ability to decentre, conserve (mass), and conserve (counting). For this, we had developed tools (appendix, IX). The observed students were grade 3 students.

2. **Focus group discussions**: FGD was conducted with parents, teachers and community leaders to find out their perception of the ECD program. They were gathered in groups of 8-12. Community members included ECD concerned VDC personnel, club members, mothers group, forest users group, political leaders and social workers.

3. Discussion and sharing with district level authorities and concerned stakeholders : The discussion and sharing session were planned with DEO, ECD focal persons, RPs, NGO partners which were organized twice. In the beginning, the team shared the

objectives of conducting this research and also gathered their perceptions and understanding and expectation towards ECD. Then we set out for the fieldwork. After the completion of the filed work preliminary field findings was shared with the same group and obtained their reactions. This debriefing session helped in two ways. In one way it turned out to be a dissemination session and in the other way it was an information triangulation process (Denzin and Lincholn, 2005). It also aimed to bring the field reality to the district planners/ implementers that can provide future direction.

4. Reflections against on the secondary sources: The data was gathered on school enrollment/retention and dropout of the grade 1 to 3 students of the study schools to figure out the consistency of test results . The individual records of the ECD and non-ECD students were gathered from the school register and verified by schoolteachers support to collect, crosscheck, and authenticate the data.

Testing instruments were as follows:

1. **Achievement test**: Student learning achievement test developed by DOE for grade 3 was used to test their learning achievements. The test was administered among both the ECD and non-ECD students. The result thus obtained was analyzed comparatively.

2.**Drawing Test**: In order to measure children's ability drawing test was conducted among children. Children were given choice to select their own theme to draw. In this test children drew whatever they wanted. Drawing specialists analyzed these drawings and figure out ECD and non-ECD children's perspectives and expression

3. **Observation test** – Observation test was conducted based on developed guideline on decentring and conservation of mass and numbers. ECD and NECD children were segregated and each sampled child from grade 3 was selected for the test. The test was conducted on one to one based on decentring and conservation concept.

3.2 Sampling Design

Multi stage sampling was done to represent the whole population. In first stage out of the 75 districts, four districts were selected for the study considering the geographical representation: Mahhotari district in the Terai region and Balung district in the mountain region, Surkhet district in the , and Jumla district from hill region . In second stage the the village were selection based on rural, remote rural, semi-urban, and urban, one school from each category were selected for the study

Table 1 Sample ECD center and sample children

Study district		
	School	No .. of children involved in observation
Baglung	4	40
Surkhet	4	52
Jumla	4	52
Mahottari	4	56
Total	20	200

In the selection of ECD centres in each district ECD supporting agencies (DOE/INGOs/NGOs/Formal groups) were involved (annex -1). Altogether, 23 ECD centers were under the study concentration.
The school and community based ECD centers were sampled after the initial discussion with the concerned district level authorities.

3.4 Study process

An eight-member research team was formed, consisting of four national level members and four from the district level. A 3-member research advisory committee supported the team at the national level. The research team prepared the study tools and solicited feedback from the advisory groups prior to implementing them. Additionally, the tools were shared with the ECD network (an informal national-level network comprised of influential members involved in ECD) before the field work was conducted. In the field district, all sharing sessions were organized with district level agencies and stakeholders at the DOE (Department of Education) office. Briefing was done at the DEO offices to assess the ECD scenarios of each respective area. ECD center and following school selection was also done in accordance with district level authorities and stakeholders.
The study team began by observing the ECD center and then went to the schools where the tests were conducted. After rapport building with the school authorities one team member conducted observation test, achievement test and the other conducted FGD with the community parents and teachers. And finally, the enrollment, drop out and mark sheet form were filled out with the help of the schoolteachers.
After completing the data collection from the field districts, debriefing sessions were conducted at district level with the same concerned agencies and stakeholders to whom tentative data's, calculation and perceptions were initially presented and shared.

3.5 Data Collection Tools

Both quantitative and qualitative tools were developed for the study. One quantitative tool was student learning achievement format developed by Department of Education which was administered to test the learning achievement of grade three students. An observation checklist was used to test the cognitive ability of both the ECD and non-ECD students. At the same time, a guideline format was developed for focused group discussion. School and ECD center forms were developed to collect information and data related to enrollment/retention and dropout rates.

3.6 Data and Information Analyses process

The quantitative component were analysed through descriptive method while thematic content analysis were done for qualitative component . The findings from the observation of the study team were cross verified with the result of the student's achievement test. The information obtained from the observation was applied for the result obtained from DEO test tools. The result received from students's achievement test was calculated to figure out the mean differences the ECD and non-ECD students. FGD information were analysed thematically. The thematic information thus obtained were compared against the findings of the quantitative data.

CHAPTER - IV
IMPACT OF THE ECD ON CHILDREN LEARNING ACHIEVEMENT

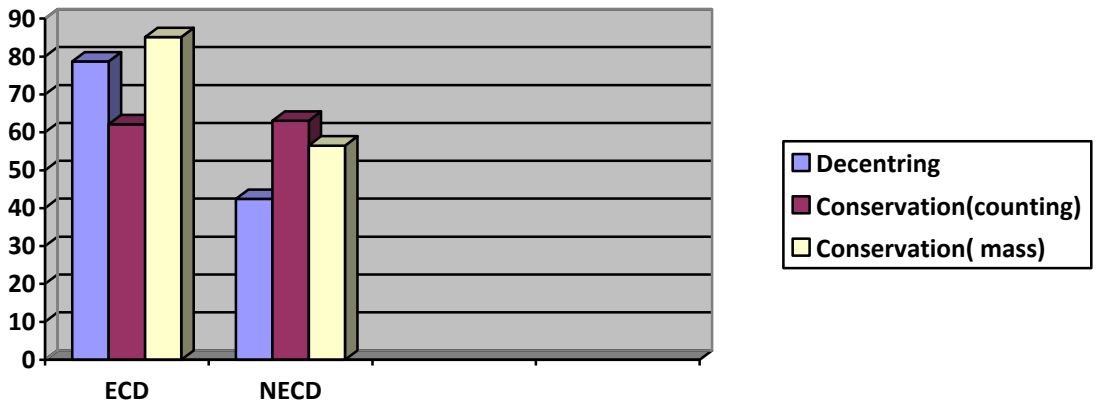
4.1 Impact on Cognitive Ability

Effects of ECD intervention in children in schools can be seen in different levels. In the output level, it is quantitative achievement of children in school; in the outcome level, it is a qualitative growth of children; at the impact level, it is a tangible outcome that a person feels; and at the cultural level, it is a sustained change. In order to evaluate the effects of ECD intervention in output level, tools were applied such as observations of the child, and discussion with the peoples of different walks of life.

The observation test was conducted among grade 3 students of sample school which was based on decentration and conserving ability of children.. Children aged 7 to 11 years participated in the observation test Altogether 200 children participated in the observation test out of which 54% were ECD and 46% were NECD students.

Table 2 : Results of the observation test

Observation Test	**ECD**	**NECD**
Decentring	78.7%	42.4%
Conservation (Counting)	62.1%	63.04%
Conservation(Mass)	85.1%	56.5%
Average	**75%**	**54%**



The table above explicitly shows the differences between the achievements of the ECD and non-ECD students. In decentering and conservation tests (Mass), the ECD students did better. But the same ECD students could not do better in the counting conservation. A similar result was found in all the study districts except Jumla, where the ECD students performed slightly better than their NECD counterparts. Both theoretical and empirical reasons for the result of the observation test are explained further below:

Empirical and theoretical reasons for decentring concept

Theoretical reason

The ability to move away from one system of classification (the ability to the group object together on the basis of common feature) to another one as appropriate is decentring ability. According to Jean Piaget, children who are in third stage i.e concrete operation stage between 7-11 yrs of age should be able to decentre objects. They should be able to see things from another point of view.

The two dolls named Sally and Ann's were shown to the children. They both had a small box in front of them. Out of the two boxes, only Sally's had a coin in it. After the initial presentation, Sally is removed from the box momentarily and then returned within a few seconds. All the detail of the scene and conversation is explained to every child. Then the facilitator asks the child from which box will Sally to look for the coin. Will she look for coin in her own box on or in Ann's box. It is believed that children who can dencentre will know that Sally will look in her own box. The child who cannot decentre will say that Sally will go and look in Ann's box. (The name of the dolls were improvised according to situation).

Empirical reason

Children from ECD background were able to decentre the object because they practice reasoning and memory games. When playing reasoning and memory games they interact with facilitators and among peer groups. Besides this, in the ECD center children also get an opportunity to explore, experience and learn through concrete objects. Hence, this rebuilds decentring capacity of the children.

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Empirical and theoretical reasons for conservation (concept of number)

Theoritical reasons – Children in concrete operation stages should be able to conserve things in their mind. Two lines of small stones (equal in number) are placed on a flat surface. Two lines each consisting equal number of few pebbles are placed on a floor, The first line of pebbles is very close to each other and are in frequent interval and another line is placed in a more distance interval. Participants are shown both the small lines of pebbles and asked which line has more stone in number.

Children who can conserve know that, as nothing has been taken away, the equal number of stone is in both the lines. They are able to analyze that stone in one line is placed at a distance and the other vice versa.

Empirical reasons

One strong reason for ECD children being able to conserve counting is that they are clearer about the concept of numbers. At ECD centre children learn to count numbers by using concrete objects. They group objects and compare length, weight, and size as they have practiced skills in their play. Before answering the question they mentally assess the number of stones per line.

Those with ECD background knew to use the available materials for learning. They also know how to link their learning with the objects. This shows that ECD children are able to examine the connections between the concrete objects and the abstract knowledge associated with it.

Empirical and theoretical reasons for Conservation (concept of mass)

Theoretical Reasons – Children in concrete operation stage should be able to conserve the concept of mass. The ability to mass conservation is to see the mass being same though the shape has changed.
The amount of clay was placed in front of participants in cylindrical shape and after some time, the clay was changed in round shape during conversation in front of them. Then the participants were asked whether it is same mass or not. The child who can conserve the concept of mass will say that though the shape of mass had changed, the amount and properties of mass is same and participants who cannot conserve would say it is the different mass.

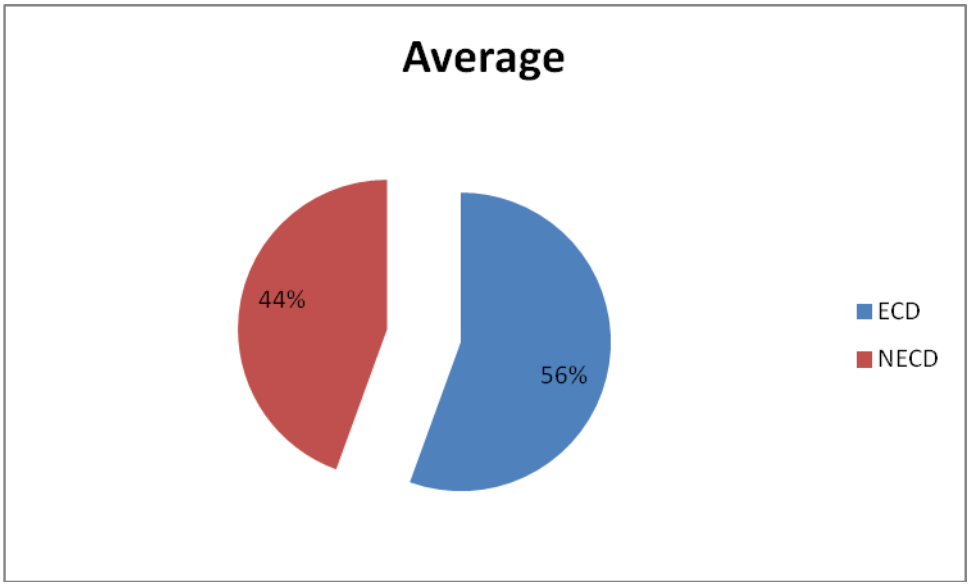
Empirical Reasons – Children at ECD centre are exposed to nature as they are provided with nature setting at the centre. They are given clay or dough to make different shapes and they are allowed to experiment further with the malleable medium Therefore, they understand how shapes can change despite a same mass.
Both the empirical and theoretical reasons along with the study's findings reaffirm the belief that children from ECD background are process-oriented learners. One can assure their ability of the ECD students can lead them to be self actualized learner in future, provided they get chance to continue this both in school and home.

4.2 Impact on Learning Achievement

The table below shows that ECD experienced students achieved higher scores in overall subjects. This result furthers the notion that it is an effective initiative to encourage ECD exposure for children in the education system. It reaffirms that the increased academic performance of those who underwent ECD is an important issue for stakeholders to consider .At the same time, it also gave objective evidence to the ECD activists to advocate for its implementation

Table 3 : Achievement scores of the ECD and non-ECD students

District	ECD	NECD
Baglung	25.03	18.66
Surkhet	42.71	19.43
Jumla	11.21	11.11
Mahottari	46.26	40.42
Average	30	24



The analysis of the above statistical information also gave proof that ECD could show impact at the output level.

The study also tried to crosscheck the above findings by comparing district to district as well. This comparison shows differences of the achievement scores (appendix, III). It also provides the information that the ECD children of Rudre Pipal center of Baglung; Shanker Primary school and Shree Kartika Swami Primary school of Surkhet; almost all of the ECD centers of Jumla, and Mahottari except Shree Ma Vi, Parsapataili ECD center have achieved better scores in school. ECD service delivery is regarded as one of the reason for this result.

In other words, the facilitators of these centers followed a deductive approach in teaching their students. The following table displays the observation of the researchers in relation to the ECD facilitation style.

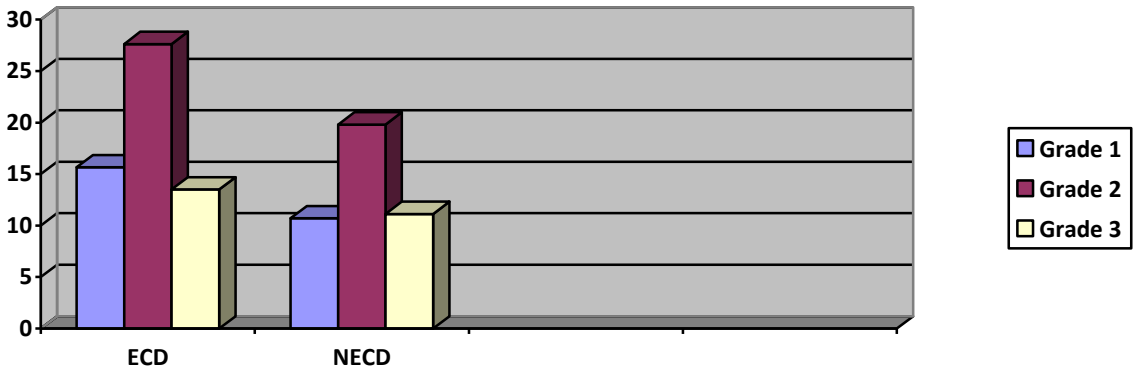
Facilitator performance also depends on quality of training they receive followed by regular backup support. Adequate funding is necessary to create an appropriate learning environment.

4.3 Impact on Class Performance

Both ECD and NECD children from grade 1, 2 and 3 annual marks obtained were collected from the schools. The data shows that ECD children could perform better in the earlier grades and began to relapse when they reached to grade 3 especially in schools where the environment was different i.e grade teaching was not implemented from what they obtained in their earlier days.

Table 4 : Average mean of Annual marks obtained b y ECD and NECD students

	ECD	**NECD**
Grade	**Average Mean of ECD**	**Average Mean of NECD**
1	15.66	10.70
2	27.63	19.81
3	13.50	11.13
Average	**19**	**14**



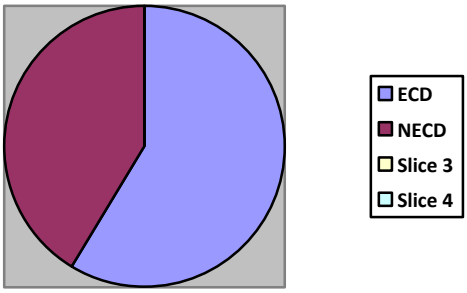
The above table gives the clue that ECD graduate did better in comparison with NECD counterparts in all grades. The table also depicts the trend of ECD students marks in grade 3 is in decreasing trend. Children from ECD background when enters formal schooling found different learning environment than that of ECD centers.

4.5 Impact on Enrollment

The study tried to examine the effects of ECD on attendance. For this the team reviewed the enrollment, attendance, and dropouts of the study schools. Prior to record these data, we identified the ECD and non-ECD children. Then the data's recorded the enrollment rate, attendance, and dropout rates separately. The data thus collected were calculated. Herein below is the table that displays the result of enrollment rate of the study districts.

Table 5 : Effects of ECD on Enrollment

District	ECD	NECD
Baglung	65.	34.
Surkhet	64	36
Jumla	59.	41
Mahottari	58	63
Total	61.5%	43.5%



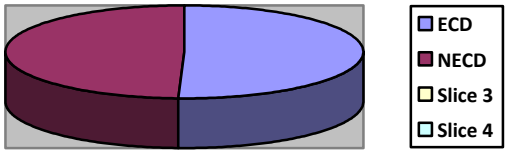
The analysis of the table above shows three directions in relation to the enrollment. They were (a) 613.03% of the ECD graduates were enrolled in school (b)38.967.07% of the NECD were admitted in school (c) The enrollment rate of both the ECD and NECD varied from district to district. Two reasons were given for the high enrollment of the ECD children in comparison with their NECD counterparts. One parent was accustomed to send their children in ECD center and send their children to school. Secondly, parents were aware about sending their children to school.

The study also tried to find out the effects of ECD on attendance. For this, attendance pattern was traced and calculated. The following table displays the result of our deeds.

4.6 Impact on Attendance

Table 6 : Effects of ECD on attendance

District	ECD	NECD
Baglung	67.57	65.88
Surkhet	80.01	71.86
Jumla	83	89.39
Mahottari	72.88	75.47
Average	78	76



The table above shows three scenarios. One, the actual attendance days of the ECD graduates was much better in comparison with their non-ECD counterparts. Two, except Baglung even the average attendance days of the ECD graduates was higher than their non-ECD friends. Three, except Jumla, the attendance percentage of the ECD children was also found better. These figures gives insight that ECD intervention helps to increase attendance. But the case of Baglung and Jumla gave another sets of understanding. In order to find out the reasons of these exceptions the questions in the debriefing sessions were organized in the district headquarters after the completion of our study. The discussions lead to identify the reasons as (a) parents of Jumla were not used to send their wards to CBECD and SBECD because they hold the knowledge that their children are too young to go to school (b) the study locations were different that contributed to the attendance rate of the children in the case of Baglung. In other words, the deviation rate of the data was high.

4.7 Impact on Dropout

Apart from the attendance rate, the dropout rate was also analysed to find out the effect of ECD in primary education. One of the main objective Herein below is the table that gives the effect of ECD on dropout.

Table 7 : Effects of ECD on dropouts

District	ECD	NECD
Baglung	6	13
Surkhet	3	8
Jumla	1	11
Mahottari	2	5
Average	3	9.25

The table above shows that ECD graduates dropped less than their N-ECD counterparts with nominal margin. The case of Jumla was different because there were no dropouts among the non-ECD children. The possible reason was that out of many others the school funding approach was tied with students' attendance rate. So, the schools did not mention the dropouts as it used to be. ECD background did not found school environment on ECD centre. So, due to lack of smooth transition they tend to drop school.

4.4 Impact on Expression

Apart from the statistical analysis free drawings sessions with participants was conducted to find out the ability of expression .

The basis for this test was according to the famous saying: “Art is a language—a form of cognitive expression”. Thus, the study tried to figure out the symbols that the children expressed through their ideas, thinking, experience, and feelings. Their symbolic activities that they showed during our research reminded us of Rain and Canday who said, “Being able to think about something not present and then find a way to express it is a major

accomplishment for young children." The psychoanalysts analyzed the expressions that could gather from the art of both the ECD and non-ECD children. . Table below shows the participation of children in drawing session.

There are altogether 163 students out of which 73 are ECD and 63 are NECD students. Going to the deeper analysis children's drawing, the study classified their work into two streams the first one is visual perception and second one is creativity. Considering the first aspect it was found that most of the ECD children at this age were confident and their fine motor development showed significant skill. In one Surkhet district (the age group was different (children from ECD were all same age group of 8 but non-ECD children varied in their age group). In other words, some were 8yrs, and others were 10 and 12 years of age. Because of these variations the differences were observed. This observable difference could be regarded as natural progression typically associated with age, in the area of children's fine motor development.

The difference observed

Going through the visual perception it was found that children's art was their expression of experiences, ideas, feelings or thoughts. In other words, child drew with own thinking, feeling, and trying to express. Otherwise, they would have drawn stereotypical things such as houses, tree, flowers etc. Looking from this aspect the drawing of children not attending ECD program revealed that there was a lack of motivation. So they had drawn several objects like houses and trees. Despite the motivations of the ECD children they too had difficulty in showing relation between their objects (school environment, home environment) that they had drawn in their arts. But children of Mahottari district had depicted cultural drawings, which they saw around their houses like triangular flowers, curved shaped elephants etc. There we found that the cultural drawings and pictures affected both the ECD and non-ECD children. But, the case of Jumla was different from Mahottari in a sense that their drawings portrayed single object. Most of them had drawn flowers and very few houses were identified in their drawings. Almost all of them had drawn drew flags and many of them apples and one of them had drawn parts of plant, which gave the idea that children's art had been very much influenced by their learning and environment. If we label the art of the children, Jumli children appeared quite undeveloped in their drawing in comparison with the required ability of their age groups.

The data also shows that almost all the children of the study districts proved their ability by their use and choice of colors. Both girls and boys seemed to use different bright colors. Few children from Jumla had used dark colors like black and brown. They have also tried to put two colors one on top of the other but rest of the children had used different colors in different space including each petal of flower. One child had drawn a girl holding gun in her hand. The hand with the gun had red color and the other one was blue, which depicted violence and peace together. This means they had made the wide range of choices of bright colors, which made their art colorful and catchy.

The analysis of children's art also shows that cultural arts are without a doubt very decorative, not only in the context of colors but the way of lines and curves. Besides that only few children had decorative art piece. They had decorated their house boundary with beautiful colored flowers.

Looking through the second stream, we found that many children had shown interest in their work but few of them had done it considering it a part of routine activity of their class. Many children had enjoyed their drawing by simply playing with their colorful pencils. This was especially so with the non-ECD children.

The same analysis helped us to know that mostly children had drawn what they saw around their house and school. It signifies that environment has a lot to do with a child's creativity. Besides this, we found that children seemed more social and through their environment they had drawn drew ideas of their own and minds of their own. This was applied to both the ECD and the non-ECD children.

Apart form the earlier analysis of children's drawing also enquired children's perspectives from what we re-read children's drawings from their explanations. This analysis helped us realize that that the drawing also expressed each one's personality. they had shown their emotions in their picture description. For example, some children from ECD experience had explained that they had drawn their sister's picture because she loved them very much. Likewise the picture of a woman holding gun had also abundant emotional feelings, which was very underneath and deeply rooted in this young artist's mind. These exemplary cases gave us ground to conclude that given the opportunity children could develop their creativity. It also taught us that to establish art in the heart of young child we should ensure sufficient opportunities to explore, feel, think, experience, and dream on what they want to draw. Besides this they need psychological motivation as well.

CHAPTER - V
PERCEPTIONS TOWARDS ECD PROGRAMS ON STUDENTS LEARNING ACHIEVEMENT

Perception differs from person to person because of their cosmos of living. These cosmos vary because of the interaction, cognition, and environment In connection with the above context, we tried to find out the stakeholders' perception about ECD. We also reflected these perceptions against our reflections. The following table gives the rundown of it.

Table 8 : Perceived differences between the ECD experienced and non-ECD students

Areas of differences	Parents' perception	Teachers' perception	Community leaders' perception
Learning style	ECD children wish to go to school more and are familiar with alphabet though they cannot read and write in sequence. But the non-ECD students want to write more than to be familiarized with the environment	ECD children try to learn from educational material, listen stories carefully, and are more creative in comparison with their non-ECD students	ECD Children are curious to learn but at the same time they are weak in writing and calculation.
Helping attitude	ECD children are more helpful than their non-ECD counterparts	ECD children are very close to their colleagues in class.	ECD children prefer more to go school. But the non-ECD children do not do so.
Social skills	ECD children are more confident and interact with others. They like elderly people and cooperate them to do their works.	The children know how to deal with teachers, follow the rules and regulation, wait for own turn before speaking, are well adjusted in groups, and love to play in groups.	The ECD children are more disciplined in comparison with their non-ECD counterparts
Importance of ECD	ECD is a secured place for their children from the cutting weapons, poison, and snakebites. It is also a venue that makes us free from child care and enables us time to work	ECD has helped us teach children easily, as they are trained to listen make students discipline. It also became a source for school to demand more quota for teachers' employment, and also a program to persuade I/NGOs for additional development initiatives	ECD has made me entry of children to school convenient . It has improved school profile in enrollment. It has also given partial employment to the girls and women especially for those who look time pass opportunity, who opt for social prestige, who need pocket money, and has keen interest to do tangible thing for the children at least at their

			own location.

All the informants regardless of the study districts had perceived ECD program as necessary input. Interestingly there was no difference between the information that we received from the informants related to the CBECD and SBECD students. This implies that peoples of different walks of life had realized that ECD program could make substantial changes in their children's life. However the following was the differences that we could capture in their perception. For instance, (a) working parents of the city centers understood ECD as care taking institute (b) parents of the rural remote areas considered it as a supplement to the private boarding school (c) teachers of the private boarding regarded it as a preparatory class for their nursery and kindergarten classes (d) teachers of the public school thought it as a preparatory session of the grade one students (e) the private individuals thought this program as an employment creating venue (f) the lay parents realized ECD as a venue to teach good behavior to their children (g) the community leaders feel that it is a program to identify and harness children's potentiality prior they go to school. These perceptual differences tell that all the stakeholders realized the importance of ECD program in education. The following table displays the reasons behind their perceptions:

Table 9 : Reasons behind the perceptions

Informants	Perceived reason
Working Parents	Our children are secured and in the safer hands and place. They can work freely without any disturbances
Parents of rural areas	They cannot afford to send their children in private boarding school and therefore send to ECD center as a substitute to boarding school
Primary Teachers	ECD program is good because it is easy to handle and teach children from when they come from ECD background, as they are already familiar with words, alphabet and numbers and better disciplined when they comes.
Lay Parents	Children in ECD become are obedient and listen to us as there they learn some social rules. It generates local employment. At the same time it prepares girls and women to be good teachers in their neighboring schools.

The analysis of the above reasons shows that ECD has become a talk of peoples' agenda. It also implies that ECD has been populat for different reasons a cake forfor all though their tastes vary and interests vary in many ways. This finding also gives knowledge that ECD has to satisfy the hopes and aspiration of many people simultaneously.

Now we will examine ECD effects at the outcome, impact, and sustainability levels by analyzing the qualitative information that we obtained in the study districts from different sources. The table below displays them.

Table 10 : Experienced effects of ECD program at different levels

Aspects of change	**At the outcome level**	**At the impact level**	**At the sustainability level**
In daily behavior	Children began to teach parents to put things in order; be neat and clean, wash hands before eating	Parents became alert to be clean and put their children clean. They became responsive to the saying and doing of the ECD children	The inquisitive habit of the child had been sustained.
In learning	ECD children continued the thematic songs and thematic stories no matter in which grades they were in	The children could link their songs and stories even in the new situation.	The prcess learning was retained by the children and this approach was recognized by the parents and the community people
In creativity	ECD children used to generate knowledge through their observation, reflection, and association with their cosmos of livelihood	ECD children showed their creativity and the imaginativeness in their learning while the non-ECD children continued the filmy songs and magical story telling approach.	The learing that had occured from the association of the children's cosmos of livelihood and the teaching style of the ECD centers was sustained
In discourse	Two types of parents one with the low income bracket and the second of the rural remote area conceived ECD as a supplement to private boarding for quality education. Their hope that ECD will make their children smart, help them learn very fast, ensure better habit within the stipulated time had been nurtured	The importance of ECD had been understood at the mothers' level.	Initially government used to offer ECD quota but mothers (busy mothers, status conscious mothers, mothers who were willing to release their older children from domestic durgery) groups were also found interested to promote ECD centers no matter they be SBECD or CBECD

CHAPTER- VI
STAKEHOLDERS ISSUES AND PROBLEMS

Issues are the areas for further discourse and the problems are the contents to be resolved . In order to find out the ECD related problems and the issues; we reviewed the literatures, analyzed the quantitative information, and reflected over the qualitative information. On the basis of these processes we could capture the following problems and the issues related to ECD programs.

ECD related issues and problems

Areas of issues and problems	**Issues**	**Problems**
Achievement related	ECD students learnt through constructivist approach. But when they got promotion to grade 1 they were forced to use the cognitivists' approach.	Due to learning approach differences in ECD and grade 1 in school, children from ECD background are lost and confused until they get used to formal routine. Once they get used to formal routine. The input in class and until grade 3 all the input by ECD program seems to be gradually disappear where as ECD has long lasting effect.disappeared
Management related	ECD facilitator play key role in ECD program in the community. They work closely with parents and management committee. They are key link between all the stakeholders. She has great influence in overall management. Contrasting to this situation facilitator's role is the lowest in school hierarchy. ECD facilitators have considered them as boss in CBECD while they felt alienated in the SBECD. Facilitators drop out for many reasons. One of them is the low honorarium offered to their job regardless of their qualification, time, and dedication.	Facilitators in SBECD are not considered as a school staff. They do not attend any monthly school meeting. This creates a gap between schoolteacher and ECD facilitator and also between school administration and ECD facilitator. Most of the issues and problems occurring in ECD center remain unsolved, as it is yet to be addressed by right person, in right place, and in right time.
Learning related	ECD children have been made used to in process learning. But when they enroll in school they have been re-cast for product approach to learning.	The problem is how to help ECD children for their smooth transition from one approach of learning to the other or help them blend these two approaches
Concept related	ECD is understood as preparatory class for grade 1 where children are gathered. Though most of the people think that it is very essential which meets every individual interest rather than right to ECD for every child for his/her holistic development.	This will not ensure the effective implementation of ECD program according to ECD philosophy and pedagogy. Here the question is how to resolve this problem
Direction related	Ideally ECD whether SBECD or	How to institutionalize the knowledge,

	CBECD should go through ECD philosophy. But the field gave the knowledge that ECD center run by full support from the donors are running very well but unsupported center are in bad condition	experiences, and skills exchange programs in all these centers is the major problem that need to be addressed at some points
Training related	One facilitator takes training and quits the job and the training-less person replace her	The training-less person focuses more on teaching than facilitation

Stakeholders Perception Issues Problem in ECD

Stakeholders	Issue	Result/ Problem
Facilitator	Low Pay scale	De-motivated to do day to day operation activities which directly effects the children's learningLack of motivation to fullfill ECD requirements. The grade teacher in the same school three times a more remuneration and ECD facilitator work is less valued. Low social status and own poor self image.
H/T and teachers in higher grade	Less orientation to ECD program and pedagogy	This result less priority to ECD lend which again effects in children learning
Facilitator	Drop-out	It is only a station until they get better opportunity. This result to wastage of resource which is already least in Education budgetFacilitators with good performance get better opportunity. This results in wastage of resource. There is no budget to provide training for the replacement, usually get promoted to teaching in higher grades with better salary.
Facilitator ECD management	Inactive management committees	Hampers the ECD center's operation ECD program should be completely a state responsibility
Facilitator	Facilitator up gradation	SBECD facilitator go to higher grades and ECD children either remain with untrai ed human resource or some time even blank which results in no ECD intervention in ECD children though it is declared that the ECD program is running.
Facilitator	Training Variety	There are varieties of Training available for ECD facilitators according to providing agencies and funding partner. Moreover, training according to budget ceiling. This variety of training which is only a ritual training and results in low performance of facilitator in the ECD center which has great impact on children's learning
ECD Personnel	Sustainability	The program is smoothly running until there is funding is secured. But aAs soon as regular funding is stopped the program collapses. This research results in heavy loss in investment of time, technology and resource.
Facilitator	No career(future) perspective	There is no career ladder in ECD program for facilitator, which result in frustration or are upgraded to primary level that finally leads to vacant in ECD levelprogram.. This again again has serious affects the children's

finally effects the learning,wasting their fertile childhood period.

The overview of the above issues and problems gives further directions. These directions for further discussions are as follows:

1. Demand is created only after mass campaigning for ECD rights. It is natural that marginalized community parents first think of livelihood not ECD for their children.
2. Despite the SBECD and CBECD's efforts it could not reach to the vulnerable groups. The demand based approach made it more confined to the interest groups only. This issue demands a balance of both the demand and the supply based approach to ECD
3. The studied SBECD and CBECD are of different status but they go through he same support system. SBECD is hosted by school in a room provided by schools. In SBECD grade I and ECD is merged. This issue demands a treatment criteria and support system for different status of ECD. Where as CBECD is run in the community with no outside supervision of support expectation from poor community is high therefore it fails.
4. ECD could not be the business of the local government, nor could it become the "stipple food" of RPs and Supervisors. Rather it became the additional job to the government, and an addendum of the development partners. This issue demands thorough review of ECD program from the organizers' point of view.
5. The studied SBECD and CBECD were of different status but they had gone through the same support system. This issue looks for differential treatment system to the ECDs having different status.
6. People of different walks of life have many hopes hoped many things from ECD. For example, private boarding school looked for academic aspect; school opted for quasi academic and practical; parents also persuaded school's intent; and CBECD promoters looked for treating the child as child. Here the issue is what should be the basis of the ECD program, the ability of the child, the need of the child, the hope of the parents, the hope of the schoolteachers, the prescription of the government, and any others.
7. ECD facilitators got rigorous training from its organizers. Some of the fortunate facilitators received refresher training as well. But when the trained facilitators quit the job for good the issue is who could train the new facilitator. This situation pushes us to develop self taught ECD package, modular ECD package, and media based ECD training programs. But there have been limited efforts to resolve this issue.

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CHAPTER VII
Major Findings and Recommendations

On the basis of the above analysis the study generated the following findings. By reflecting the findings from different perspectives the study came up with the following major recommendations.

Cognitive ability: In the area of cognitive ability, 75 % children attending ECD program proved themselves better than children not attending ECD program comprising 54%..

Learning achievement: information gave the knowledge that ECD graduates regardless of their origin could show better performance than their non-ECD counterparts in learning achievement. 30% of children attending ECD program had better results comparing to their Non ECD counterparts.

School Success: 19 % of the children **attending** ECD program did better in the final school administered test comparing to children who did not attend ECD program were 14%.

Enrollment/Attendance/Dropout of children - Out of the total children enrolled 61.5% were children who attended ECD program remaining43.5% enrolled in grade 1came directly from home. On the other hand, attendance and retention of children from ECD background was low compared to their non ECD counterpart. While 9.25% of Non ECD children dropped out from early grades than children attending ECD program which comprise of 3% only.

Ability to Express:

Perception of different stakeholders (parents, teachers and community): As far as perception is concerned most of the stakeholders has perceived ECD program as essential in increasing children's ability focusing on learning style, helping attitude and social skills. School teachers believe children from ECD background come up with different learning styles i.e., they are more process oriented learners and at least familiar with words and letters which makes them easy in classroom teaching /learning environment. Children from ECD background are more familiar with classroom and school environment other than children who come directly to school. Parents of ECD and non ECD children focus more on social skills and helping attitude. They believe that after going to ECD center thier children have enhanced their social skills like, greeting the elders, respecting others and more aware in day to day hygiene practices in home. Community people perceive that ECD program has changed the daily schedule i.e., habbit of going to ECD center, children are secure and safe.

Recommendations

Since ECD could satisfy different stakeholders of education, the study recommends that there should be wide ranges of national discussions at the local government level. The local government, lead school, or the ECD promoters could coordinate such discourse sessions. Following such discourse sessions ECD programs should be made available to the needy groups of the people through both demand and supply based approaches.

The study also recommend for ECD and non-ECD parents discussion sessions; ECD and non-ECD children's discussion sessions; CBECD and SBECD facilitators' discussion sessions; ECD facilitators' and school teachers and head teachers' sessions; school management committee and ECD management committees' discussion sessions. These sessions as mentioned earlier could be coordinated at the local government level.

Similarly we suggest to hold inter political party cadres and leaders' level discussion sessions about ECD to expand and consolidate this program.

The study recommends enabling CBECD to enroll more children in school. For this the current process should be revised to ensure all CBECD graduates' in school. At the same time we suggest for updated record keeping system at school and the CBECD center about the child's enrollment and retention status. We are also aware that this suggestion is applicable in villages than in the schools of the towns and cities.

In order to accommodate stakeholders' perception with the ECD children's ability, we recommend for (a) basic research to be done by the ECD facilitators and the schoolteachers (b) development of self taught and media taught basic and refresher training programs (c) preparation of self reported supervision system (d) initiation of ECD graduates' club at the community level (e) development of volunteer facilitators and supervisors (f) periodic exchange sessions of the school teachers and the SBECD facilitators (g) introduction of ECD facilitators' support such as media based open education program, scholarship for formal education, saving scheme (h) ECD grading and funding in accordance with its level (i) media and listeners club based parental education program (j) local government level reward system for the ECD promoters whether they be the facilitators or the management committee members (k) regular sharing between the SBECD facilitators' knowledge, skills, and experience with the teachers and vice versa at the school level (l) periodic sharing session of the ECD parents non-ECD parents about the performance of their children including that of the CBECD's and SBECDs.

Both quantitative and qualitative data shows that ECD program is essential for children’s learning outcome. The current ECD investment is hugely focused at expansion and moderate at ensuring the learning environment in the ECD center. Investment in ECD is very low ie. 6% of EFA) which should be increased In order to ensure the quality intervention of ECD in Nepalese children recognizable investment further is essential by Government, Donors, and Local individuals at all levels i.e., national, district and community)

Education is much talked issues in media but it seems ECD agendas are beyond the scene. So, the study recommends advocating ECD through media intervention.

Annexes:

Annex - I

Participant Observation tool for cognitive ability

1. Decentring Test [salley and Anne Test]

Process

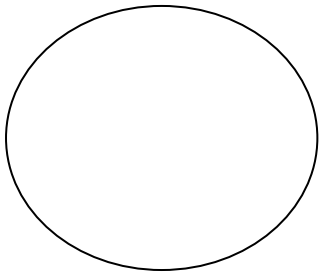
- Showing the child two dolls
- Telling the child that one doll is called salley and the other is called anne
- Then give both dolls a box . Put a counter in sally's box
- Tell the child that while sally is not there, Anne sneaks up and takes away sally's counter and puts it in her own box
- Show this to the child
- Ask the child where sally will look for her counter when she comes back

Children who can decentre will know that sally will look in her own box. Children who cannot decentre will say that sally will go and look in Annes box.

2. Conservation Test

- Children are shown two identical ball of clay.
- One piece of clay is flattened or rolled into a sausage shape in front of the child .
- Children are asked if they are the same or different .

A Child who can conserve understands that the amount of clay is same, but the shape has changed



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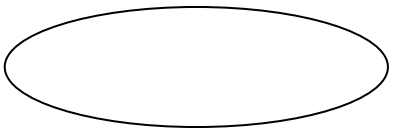

After

Annex II

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Seto Gurans National Child Development Services [A Training and Re

A study on Impact of ECD in primary Education: with special focus on children's Le

Student Marksheet Format

[This research is being conducted to see the learning achievement of Children of primary level from ECD a

District:

Name of the School:

Background of the student: ECD\Non ECD

Name of the Teacher:

Name of the training Approach:

Mark obtained in the subjects in grade 1

Name of the Student	ECD\ Non ECD	Caste\ Ethnicity	Gender	Age	Nepali	Math	Social	Science\e vironmen

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Enrollment \Attendance\Drop out form

[This research is being conducted to see the learning achievement of Children of primary level from ECD a

District:

Name of the School:

Grade 1

Name of the Teacher:

Name of the training Approach:

Name of the Student	ECD\ Non ECD	Gender	Age	Caste\Ethnicity	Enrolled	Attenda

Annex VI

Seto Gurans National Child Development Services
[A Training and Resource Center]

A study on Impact of ECD in primary Education: with special focus on children's Learning Achievement

Focused Group Discussion guideline for Parents

[This research is being conducted to see the learning achievement of children of primary level from ECD and non ECD background]

1. Name of the school :
2. Number of parents :
3. welcome and explain the aim of discussion to parents
4. Think of your Child at the time he\she entered into the ECD Center.
5. What was he before and what change come over him after ?
6. Then, what are some of the good habits your child have
7. What has been the effect of this habit on his\her learning achievement
8. Do Children make comparisons of ECD Center and Schools ?
9. What are some bad habits that you like Children to improve in School
10. What difference you find between the facilitators of ECD Center and the teachers of schools ?
11. What should be done to develop a good habit and learning achievement of your Child ?
12. How should it be done ?

Annex VII

Seto Gurans National Child Development Services
[A Training and Resource Center]

A study on Impact of ECD in primary Education: with special focus on children's Learning Achievement

Focused Group Discussion guideline for primary Teachers

[This research is being conducted to see the learning achievement of children of primary level from ECD and non ECD background]

1. Name of the school :
2. Number of parents :
3. welcome and aim of FDG explain to parents
4. Think of your Child at the time he\she entered into the ECD Center.
5. What was he before and what change come over him after one year ?
6. Then, what are some of the bad habits your Child must continued going to School?
7. What has been the effect of this habit on his\her learning achievement
8. Do Children make comparisons of ECD Center and Schools ?
9. What are some bad habits that you like Children to improve in School
10. What difference you find between the facilitators of ECD Center and the teachers of schools ?
11. What should be done to develop a good habit\learning achievement of your Child ?
12. How should it be done ?

Annex – IV

Schools and ECD centers in Baglung district

S.N	Schools	ECD centers			
		Community based	**School based**	**NGO Supported**	**DOE supported**
1	Rudre Pipal Ni Ma Vi		Bhagwati Mai Bal Bikash Kendra		√
2	Kudule Ma Vi	Kudule bal Bikash Kendra/ Ananda Bal Bikash Kendra		√	
3	Shivalaya Pra Vi (Transition)		Shivalaya Bal Bikash Kendra	√	
4	Macha Puchre Pra vi (Transition)		Lami danda Bal Bikash kendra	√	

Schools and ECD center in Surkhet district

S.N	Schools	ECD centers			
		Community based	**School based**	**NGO Supported**	**DOE supported**
1	Madarsa Madina Pra Vi	Sishu Bikash Kendra		√	
2	Janajyoti Ma Vi			√	
3	Kakre Bihar Pra Vi	Jana Jagaran Bal Bikash Kendra/Choukhedhunga Balbikash kendra			√
4	Dasarath Shikar U Ma vi		Sikar Bal Bikash Kendra		√

Schools and ECD center of Jumla district

S.N	Schools	ECD centers			
		Community based	**School based**	**NGO Supported**	**DOE supported**
1	Shanker Pra Vi	Deuti Bal bikash kendra	Mahadev Bal Bikash Kendra	√	
2	Karnali Mavi			√	
3	Shree Sambhu nath gyan kunja	Thadapakha Balbikash kendra	Devi Bal bikash kendra	√	

Annex VIII

Seto Gurans National Child Development Services
[A Training and Resource Center]

A study on Impact of ECD in primary Education: with special focus on children's Learning Achievement

Focused Group Discussion guideline for Community

[This research is being conducted to see the learning achievement of children of primary level from ECD and non ECD background]

1. District
2. Personnel: Selected VDC, Ward Members, Local Leaders, Farmers group, Mothers group, Local clubs, Health post, village Health Workers
3. Introduction of FDG group.
4. Aim of FDG will be explained
5. Brief discussion on limitation of ECD centers and their area
6. Do you think the ECD centers have brought any change in the society ?
7. What changes have you noticed ?
8. Community as a whole parents , parents, Children, younger children.
9. What are the good practices that were not they before ECD ?
10. Have you found any kind of differences in Children from ECD and non ECD background
11. What has been the effect of ECD in Children learning in School ?
12. Do you think children are doing better in school because of ECD learning? How?
13. Is there any change in you or your thinking because of ECD program ? What are those changes if there was any ?
14. How should it be done ?

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