

Baseline Study on International Development and Early Learning Assessment (IDELA)

Kavre

Submitted to

**Save the Children Nepal
Nepal Country Office**

Shree Krishna Bhawan, Airport Gate, Shambhu Marga
Kathmandu Nepal,

Submitted by

Research Inputs and Development Action (RIDA)

House # 1357, Bhimsengola-34, Kathmandu, Nepal

GPO Box: 25414, Phone: +977-01- 4470803

Email: mail@ridanepal.org, ridanepal@yahoo.com

August, 2016
Kathmandu Nepal



Table of Contents

Acknowledgements	3
List of Acronyms.....	4
Executive Summary	5
1. Introduction	7
1.1 Background	7
1.2 Context.....	8
1.3 Study Objectives	10
1.4 Key Research Questions	10
2. Study Design & Methodology	12
2.1 Baseline Design	12
2.2 Methodology.....	13
2.3 Study Procedure	15
2.4 Limitations	16
3. Study Results	17
3.1 Home environment.....	17
3.2 Home Learning Environments	18
3.3 ECCD participation and expectations	22
3.4 Child Results	24
Motor skills	24
Emergent Numeracy	24
Emergent Literacy	25
Socio-emotional development.....	25
Executive functioning	26
Approaches to Learning	26
Total IDELA	27
3.5 Connection between home environments and children’s development	28
4. Conclusion & Recommendations.....	32
4.1 Conclusion	32
4.2 Recommendations	32
References.....	34
Annex 1: List of schools covered	35
Annex 2: List of assessors	37

Acknowledgements

Administering IDELA tools with ECCD children was a huge learning opportunity as well as massive challenge for RIDA and its team. We are thankful to Save the Children Nepal for entrusting us with the responsibility to conduct Baseline Study using IDELA tools. The technical support from Save the Children was instrumental in performing this task. We are thankful to Jarret Guajardo, Senior Specialist, Basic Education and Literacy Research, Sara Dang, Senior Specialist - Early Childhood Care and Development, and Matrika Sharma, Senior Monitoring and Evaluation Coordinator, Save the Children Nepal for their regular support and feedback. We are also thankful to rest of the education team in Save the Children, their field staff, and partner organizations for their regular support.

We are also thankful to District Education Office, Kavre for their support in identifying control schools and collecting other related information. We are also thankful to schools and ECCD centers who cooperated well during the data collection process. Last but not the least, the research enumerators, team leaders (Prakash, Binisha, Navin, Ujwal) and data managers (Sunil Poudel and team) deserve special appreciations.

RIDA Team

Jeevan Raj Lohani, Team Leader

Devina Pradhananga, ECCD Specialist

Diwakar Basnet, Consultant

List of Acronyms

DOE	Department of Education
DEO	District Education Office
ECCD	Early Childhood Care and Development
ECED	Early Childhood Education and Development
EFA	Education for All
GoN	Government of Nepal
IDELA	International Development and Early Learning Assessment
MDG	Millennium Development Goal
NASA	National Assessment Student's Achievement
NER	Net Enrolment Rate
PPC	Pre-Primary Classes
RIDA	Research Inputs and Development Action
SSRP	School Sector Reform Program
STR	Student-Teacher Ratio
SCN	Save the Children Nepal
SMC	School Management Committee
UPE	Universal Primary Education
VDC	Village Development Committee

Executive Summary

Context. In 2015, Save the Children has education programs in 18 districts and works with 1402 ECCD centers and 1332 schools. Save the Children began implementing ECCD programs in Nepal in 1997 to help children to learn and develop their full potential. Recently, Save the Children has developed a tool to measure ECCD children's developmental outcomes - International Development and Early Learning Assessment (IDELA). RIDA, an agency specialized in monitoring and evaluation, supported save the children to administer IDELA in Kavrepalanchowk district. Primarily, the baseline was envisioned to enable the systematic monitoring and evaluation of the project by setting up the starting point. The set objectives for this baseline are more related to getting current value for outcome indicators.

Methodology and limitations. The study included three tools: IDELA test, survey with parents/caregivers, and team member paper (with information related to ECCD centers). IDELA included five domains focused on gross and fine motors skills, emergent literacy, emergent numeracy, socio-emotional development and approaches to learning. The tool was slightly adjusted for use in Nepal, and was translated to Nepali, and local language (Tamang). The tests were administered through trained local enumerators. IDELA test was administered among 400 ECCD enrolled children (including 200 in control and 200 in intervention area) from around 40 ECCD centers. All ECCD centers selected for project implementation were covered while the ECCD centers for control were randomly selected. The study used quasi experimental design in a setting where the sites were not identified randomly. The control and treatment sites were not identical.

Findings

Family environment. The average age of the child in project schools was 4 years and 4 months. The children in control ECCD centers were significantly younger (4.1 compared to 4.3) than treatment groups. The main home language in treatment group was Tamang for majority households. There were more proportion of families in control (53% compared to 42% in treatment) with Nepali as a language spoken at home. Fathers had better education status compared to mothers. In project schools, around 52 percent mothers were literate (63% in control) while 86 percent fathers were literate (87% in control). There was no significant difference in the parental education for control and treatment groups. On an average, there were around two children below six years, one child of age 6-12, and around four members over 17. There was no significant difference between treatment and control groups in terms of how many children are there in the family.

Home learning environment. The availability of materials among children was quite low, particularly for books, magazine, and materials that are directly related to learning. Children in treatment had larger access to story book, textbook, magazine, puzzle, and shapes while children in control had better access only to toys. Many children have received support from their parents. Around 6-8 in 10 children have received support from the parents in learning activities such as reading, identifying numbers, identifying letters etc. In terms of activities, there is not much difference between control and treatment except the control was better than treatment in terms of taking children outside house. In general, mothers were heavily engaged in conducting activities for children compared to father and others (grandparents, brothers etc). Treatment had more proportion of mothers conducting activities with children while control had more proportion of father and other family members engaged with children.

IDELA results. The total IDELA score also remained on a lower side. In a percentage scale, the aggregate IDELA score (in%) for project ECCD center was 20.1 (21.2% for boys and 20.0% for girls). The total IDELA score was 23.9 percent for control ECCD centers. In the aggregate score, there was significant difference by ECCD type (control and treatment), and gender (girls and boys). The control ECCD centers had better IDELA score compared to treatment ECCD centers, and boys had better scores than girls.

IDELA key indicators mean scores

Total	Control		Treatment		~ Type * Gender
	Boys	Girls	Boys	Girls	Main effects
Motor skill	22.9%	20.4%	19.3%	18.8%	
Early literacy	24.9%	22.3%	18.6%	18.1%	Type: 0.000***
Early numeracy	32.0%	25.8%	28.5%	27.2%	Gender: 0.009***
Socio-emotional development	18.9%	17.9%	17.9%	15.6%	
Executive Function	28.3%	28.6%	27.0%	24.8%	
IEDLA Total	24.8%	21.9%	21.2%	20.0%	Type: 0.03**, Gender: 0.09*

Source: IDELA Baseline Study Data, 2016 (403 observations)

Factors associated with IDELA score. The key factors that were positively associated with IDELA score were children's age, previous ECCD experience, resource index, activity index, and father's education. Other factors that were fairly associated with the scores were: caste/ethnicity (being from Brahmin and Chhetri community compared to Tamang and dalit community), home language (having Nepali as a home language compared to Tamang), socio-economic status of the family, and protection index. Adversity factor was not associated with the IDELA score.

Conclusion. The baseline study clearly indicates that the existing level of child learning and development is poor. The IDELA score for children is mediocre (22.10%). The girls have lower level of learning and development compared to boys, and it was lower for project ECCD centers than control ECCD centers. The availability of learning resources was low for children while their participation in activity was quiet high. However, the activities were mostly led by mothers with very limited participation of father and other family members. There are some factors with significant associations to IDELA score. The availability of learning resources and activities together with parental education (especially that of father), and protective factors contributed to the score.

Recommendations. RIDA recommends Save the Children and its partners to review the study findings, and have detailed discussions and brainstorming to generate possible inferences for the project. Nevertheless, some key inferences are:

- Support family members especially father and other family members to increase number of learning activities for children which are better organized and targeted;
- Make playful learning resources available to children with purposive orientation to parents and other caretakers on how to utilize them for child's learning and development;
- Promote activity with father, and other family members; and
- Focus on having adequate learning resources and activities for girls in ECCD centers and also at home.

1. Introduction

1.1 Background

Despite a decade long armed insurgency and other political turmoil in the country, Nepal has witnessed significant progress in terms of expansion of public school system, especially at the primary level. The Constitution of Nepal, 2015 has recognized basic education as a fundamental right of all citizens along with the provision of free education up to the secondary level. Education has been the chief social sector that receives highest proportion of government budget. For FY 2015/16 government has allocated 98 Billion Nepali Rupees (12.9% of the total public expenditure) for education sector (MOF, 2015). The school education in Nepal has expanded over the years with massive increase in the number of schools, students, and teachers. Universal primary education (UPE) has been explicitly prioritized agenda of the government following to its commitments to Education for All (EFA), and Millennium Development Goals (MDGs). The country is currently implementing School Sector Development Program (SSDP), third sector wide approach program of its kind.

Nepal is considered to be remarkable achiever in terms of school enrollment especially in primary level. Based on the most recent flash report published in 2014, the net enrolment rate (NER) for the primary level (grades 1-5) was 96.2 percent¹ while the NER for lower secondary and secondary level is around 75 percent, and 56 percent respectively (DOE, 2014). These figures indicate high level of drop out and repetition from primary to lower secondary level.

Table 1. Student drop out and promotion rates for various levels

Levels	Total number of students	STR (community school)	NER (%)	Promotion Rate (%)	Drop Out Rate (%)
Primary (1-5)	4,335,355	36	96	86.7	4.2
Lower secondary (6-8)	1,835,313	60	75	90.1	5.3
Secondary Level (9-10)	900,585	37	56	91.4	5.3

Source: DOE (2015), Flash I Report, 2014-2015

Along with improvements, there are also numerous challenges. The school education suffers in terms of internal efficiency, and quality of education. Based on National Assessment of Student's Achievement (NASA) learning achievement studies conducted during 2011-2013 commissioned by Education Review Office, Ministry of Education, the learning achievement rates are lower (in between 50-60 percent) for primary grades and around 40 percent for secondary grades in the most recent (DOE, 2014). The key reasons for poor learning outcomes are: poor classroom teaching learning practices, inadequate participation of children in the learning process, and poor availability of learning materials for children. There have also been numerous efforts to improve the quality of education in community schools.

There is a problem in ensuring equal rights and quality education for all children due to huge gap in quality of public schools (community schools) that cater to children from poor households, and

¹The figure is believed to have been inflated due to wrong reporting by schools because the household surveys present completely different picture. The National Living Standards Survey (NLSS-III) published in 2011 reported that the actual NER observed in the household survey was only 68.8 percent which was a decrease of nearly 3 percent from the NLSS-II figures of 72 (CBS, 2007 & CBS, 2011b).

private schools (institutional schools) that cater children from rich sections. School education reflects the existing inequity in the country. There is also huge difference in access to school across Nepal due to socio-economic and demographic groups. Raising education quality in public/community schools in Nepal is an urgent priority that could transform the country's economic landscape.

While the constitution as well as legal documents have explicitly mentioned school education, there is very limited priority given to Early Childhood Development (ECCD). The local self governance act, 1991 classified ECCD as a prime responsibility of the local government (VDC, Municipality). The early childhood education and development (ECED) goal stipulated in the EFA National Plan of Action (2001-15) provides a basis for the implementation of ECCD/PPCs in the SSR Plan. In Nepal, the SSRP goal regarding the Early Childhood Development (ECCD) activities is in line with the Dakar Framework of Action for EFA (2001-15). In recent years, ECCD has received some priority. There is a separate section within Department of Education (DOE) to deal with ECCD. Flash Report collects and presents the data related to ECCD on a regular basis.

There are various forms of ECCD/PPCs, which include school-based ECCD centers, community-based ECCD centers and privately managed pre-primary classes. Schools give different names to these classes such as Nursery, Kindergarten, Montessori etc. There are 35,121 ECCD centers in the country which includes 30,034 (86%) community based or community schools based centers. The remaining 5,087 (14.5%) of the ECCD/PPCs are operating under institutional schools.

Table 2. Distribution of ECCD centers by eco-regions

Eco-belts	Community	Institutional	Total
Mountain	3,117	186	3,303
Hill	13,620	1,610	15,230
Valley	795	1,169	1,964
Terai	12,502	2,122	14,624
Total	30,034	5,087	35,121

Source: DOE (2015), Flash I Report, 2014-2015

Based on DOE, Flash I report 2014/2015, in total 1,014,339 children are catered by 35,121 ECCD/PPCs. The present ratio of total children enrolled in the ECCD/PPCs and the existing number of ECCD/PPCs is 1:29 (compared to 1:30 in the last school year), indicating a need for a mechanisms to enable ECCD/PPCs to maintain the prescribed class size of ECCD/PPCs and children ratio (i.e. 1:20) (DOE, 2015). Based on age wise enrollment (considering age 4 as appropriate for ECCD), 78 percent of students were of age four. The percentage of new entrants in school with ECCD/PPC experience has increased over the years. At present around 6 in 10 new entrants (57%) in Grade 1 have previous ECCD experience. Altogether, there are 41,447 ECCD facilitators currently working in ECCD centers (DOE, 2015).

While ECCD has clearly expanded over the years despite unclear resource priority of the government especially in terms of managing ECCD facilitator and infrastructure, there is very limited knowledge about the existing status of children's learning and development within the ECCD centers in Nepal.

1.2 Context

Save the Children began implementing ECCD programs in Nepal in 1997 to help children to learn and develop their full potential. In 2015, Save the Children had education programs in 18 districts and works with 1402 ECCD centers and 1332 schools.

Recently, Save the Children has developed a tool to measure ECCD children's developmental outcomes. This tool is commonly known as International Development and Early Learning Assessment (IDELA) and will be used to establish a baseline of children's learning and development at beginning of the project and a final assessment of children at the end of the school year. IDELA was developed by Save the Children for the assessment of children aged 3.5 – 6.5 years. Testing and modifying the tool over multiple years across many countries (Bangladesh, Bhutan, Egypt, Ethiopia, India, Indonesia, Mali, Malawi, Mozambique, Pakistan, Rwanda, and Zambia) has resulted in a 24-item assessment that balances three key dimensions: psychometric rigor, feasibility, and international applicability. As a result, IDELA is easily translated and administered in varied cultural contexts, and has strong reliability and validity.

IDELA includes six domains focused on gross and fine motors skills, emergent literacy, emergent numeracy, socio-emotional development, executive control and approaches to learning. Table 1 displays the items that will be included in this study's IDELA.

Table 3: Core IDELA items

Gross and Fine Motor Skills	Emergent Literacy	Emergent Numeracy	Socio-emotional Development	Executive control	Approaches to learning
Hopping	Print awareness	Size/length identification	Friends	Short-term memory	Attention
Copying a shape	Expressive vocabulary	Sorting	Recognizing emotions in self	Inhibitory control	Confidence
Drawing a human figure	Letter identification	Number identification	Recognizing emotions in others		Concentration
Folding paper	Emergent writing	Shape identification	Conflict resolution		Diligence
	Phonemic awareness	One-to-one correspondence	Personal information		Motivation
	Oral comprehension	Simple operations			Curiosity
		Puzzle completion			

Source: Save the Children, IDELA Guidelines

Kavrepalanchowk is one of the Save's working district where ECCD related interventions are currently underway. Based on Flash-I, 2015, there are 590 centers with 16,365 students (including 7,754, 47% girls) currently enrolled in the ECCD center. The students included 8,380 janajatis (51%), and 1,262 dalits (7%). A center catered around 28 children. There are 797 facilitators (including 82% female facilitators) currently working in these schools. Among the facilitators, 509 (64%) were trained, and 90 percent (722) were fully qualified. The facilitator to

student ratio was 21 children for one facilitator. Around 79 percent children who newly entered in Grade 1 had previous ECCD/PPC experience (DOE, Flash - I Report 2014/15, 2015).

Research Inputs and Development Action (RIDA)² supported Save the Children to conduct baseline study using IDELA tool in Kavrepalanchowk district during June - August, 2016. This is the baseline study report.

1.3 Study Objectives

Primarily, the baseline was envisioned to enable the systematic monitoring and evaluation of the project by setting up the starting point. The set objectives for this baseline are more related to getting current value for outcome indicators. This baseline also aims to provide information to inform the design and adaptation of Save the Children's ECCD programs to the context and children's specific needs.

The specific objectives are as follows:

1. Find out the current status of children's early learning and development outcomes in Kavrepalanchowk district by program (program and non-program), sex (boy & girl), and caste/ethnic groups
2. Find out the current status of care giving practices in Kavrepalanchowk district

1.4 Key Research Questions

The key research questions of the study were as follows:

1. What do the family environment and home learning environment look like for children in intervention and comparison ECCD centers?
 - What assets and gaps exist with regards to:

- types of books in the home	- types of learning activities that at least one household member is doing with the children
- types of toys in the home	- Amount of time spent engaging/stimulating children

2. What does children's development status look like in terms of their performance on IDELA domains, subtests, and overall IDELA score? (disaggregated by sex and age, similar to Afghan report)
3. How do the following correlate, if at all, with IDELA score? (controlling also for sex, age, ECCD experience and number of household members)

² RIDA is a Nepal based international research agency which specializes in monitoring and evaluation, and qualitative research. RIDA works primarily in education, health and nutrition, behavior change communication, ICT for development, and agricultural economics.

- | | |
|---|---|
| <ul style="list-style-type: none">- Language- Caste- Socio Economic Status- Home learning environment: resource index (either books, toys, or both) and activity index | <ul style="list-style-type: none">- Parental expectations- Parental education (use the one variable that has the most variation or is most strongly correlated with IDELA) |
|---|---|

4. What are the most and least prevalent types of adversity?
 - What is the prevalence of spanking/hitting children and caregivers, and what is the prevalence of child neglect? (both of these we will report to the relevant local child board)
 - How does exposure to adversity correlate to IDELA scores in this context?

2. Study Design & Methodology

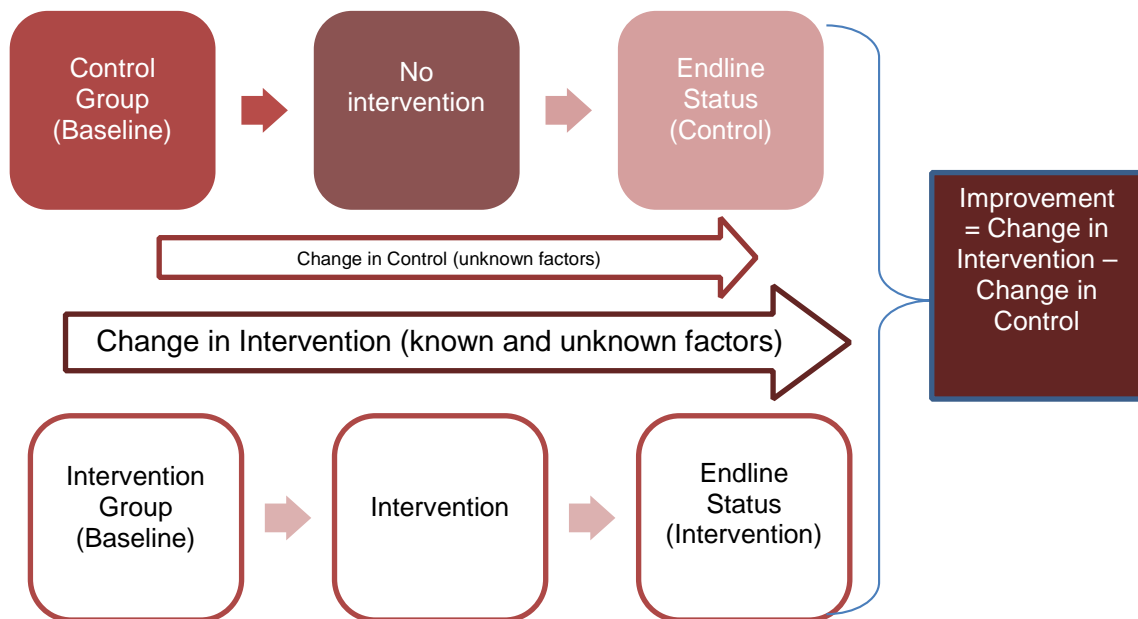
This sub-section describes overall study design and methodology.

2.1 Baseline Design

Quasi-experimental design was used for the baseline study creating a 'control' group for assessment of 'counterfactual'. Although this study does not meet all requirements for experimental design, the design has been made to ensure that there is enough ground to have indicative comparison between 'project' and 'non-project' sites. The individuals/areas where the intervention are currently undergoing were selected purposively (without any form of random assignment) by the implementers. The VDCs were considered as 'zone of influence'. For every project VDC, another non-project VDC was selected to enable comparison, based on discussion with the local education authority - District Education Office. The ECCD centers within non-project sites or VDCs were selected randomly. For this study, the study design including the sample size calculation was overseen by Save the Children Nepal.

The chart below provides graphical illustration of how quasi-experimental design will work illustrating the use of 'double difference' calculation during the endline study.

Chart 1. Quasi Experimental Design (Double Differences)



Based on the design, new enrolled children in ECCD are tested at the beginning of the academic calendar. They will again be tested after end of the academic session for the endline. The tests will happen at the 'project' as well as 'non-project' sites. At the end, comparison will be made between baseline and endline figures across treatment and control groups to determine whether ECCD related interventions had any influence on the children's learning and development.

2.2 Methodology

This section summarizes methods and tools to be used in the baseline study. The baseline study consisted of International Children Development and Early Learning Assessment - IDELA test with children who were attending ECCD centers regardless of their ECCD experience, and survey with the parents of selected children.

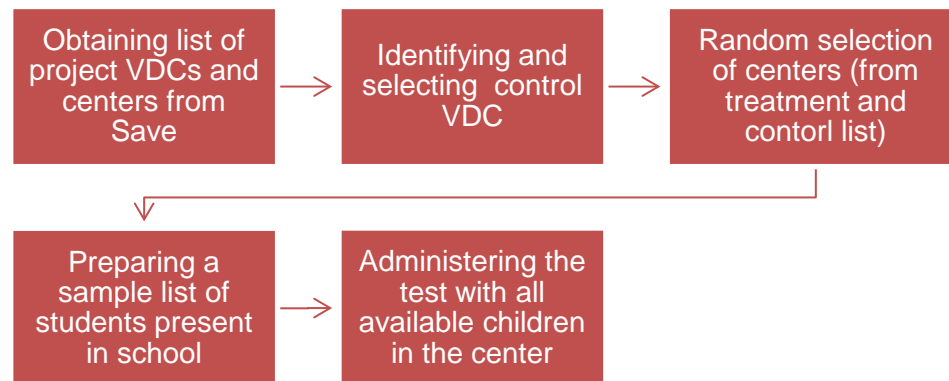
Tool 1: International Children Development and Early Learning Assessment - IDELA

Rationale. The objective of learning achievement assessment is to identify the change i.e. improvement in the learning achievement of the children in the program areas. The assessment will ascertain the change among 800 children from Saptari and Kavre districts of Save the children and Non-Save the Children program site.

Indicators: IDELA Score

Number and sampling. For IDELA test, more than 406 students were selected from 40 ECCD centers. In Kavre, all program implemented schools were covered in the baseline study. Control VDCs were identified through consultation with SCN, local implementing partner organization and district education office (DEO). From the list of centers from selected VDCs, 20 centers were randomly selected to be part of 'control' group. The list of schools and VDCs is included in the Annex I. In each identified centers, all available children were included for the test. The steps followed in selecting the children is as given below:

Chart 2. Sampling Steps



Considerations in facilitating IDELA test. Before taking the test, ECCD facilitators and school head teachers were informed and consulted about the test and its nature. After random sampling of children, the children appearing for test were clarified on what the test is about. The researchers tried to make them comfortable with seating arrangements and test venue maintaining privacy and peace to avoid disturbances from other children and assessors.

Contents. The IDELA Score is constructed based on scores obtained for motor development, literacy, numeracy, socio-emotional development, approaches to learning, and executive control. Altogether 22 items were included in the test. From the international guidelines on IDELA, two items (copying a shape within fine motor, and hopping within gross motor) were removed to save time when administering the test. The students were separately graded for each items before calculating a weighted IDELA score based on the four core domains of

motor development, emergent literacy, emergent numeracy, and socio-emotional development.

Table 4. IDELA Domains and Skills

Gross and Fine Motor Development	Emergent Literacy and Language	Emergent Numeracy	Socio-emotional Development	Executive control	Approaches to learning
Drawing a human figure	Print awareness	Measurement and comparison	Peer relations	Short-term memory	Attention
Folding Paper	Expressive vocabulary	Classification/Sorting	Emotional awareness	Inhibitory control	Confidence
	Letter identification	Number identification	Empathy		Concentration
	Emergent writing	Shape identification	Conflict resolution		Diligence
	Initial sound discrimination	One-to-one correspondence	Self-awareness		Motivation
	Listening comprehension	Simple operations			Curiosity
		Problem solving			

Tool 2: Parents/Caregivers survey

Rationale. The objective of parents/caregivers' survey was to identify existing care giving practices. The survey with parents/caregivers collected the information about parenting knowledge, care giving practices and various adversity and protective factors.

Number and sampling. The survey was conducted with 363 parents/caregivers of the children sampled and selected for IDELA test. Some parents who could manage time were invited to schools while others were reached at home. Some parents of the children who were included in the test could not be reached for the interview. Most of them were not available at home.

Contents. The survey with parents collected background information related to the family and the children. It included following information:

Table 5. IDELA Caregiver questionnaire

Section	Description
1. General family information	Sex of child, child age, number of children at home, parental literacy, parental education, languages spoken at home
2. ECCD experience and educational expectations	Child participation in ECCD programs, details of participation, parental expectation and aspirations of child's educational attainment
3. Access to early learning materials and resources at home	Types of reading materials at home, types of toys at home

Section	Description
4. Parenting practices and support for learning and development	Adults in the home engaging with children to promote learning and development
5. Inadequate care	Children left alone or in the care of another young child
6. Socioeconomic status	Housing materials, objects/appliances owned, land/animals owned
7. Adversity, protective factors & resilience	Adversity: Disasters, illness, shocks, conflicts, threats etc.; Protective factors: low adult-child ratio, remittances from migrant worker, accessible health facility

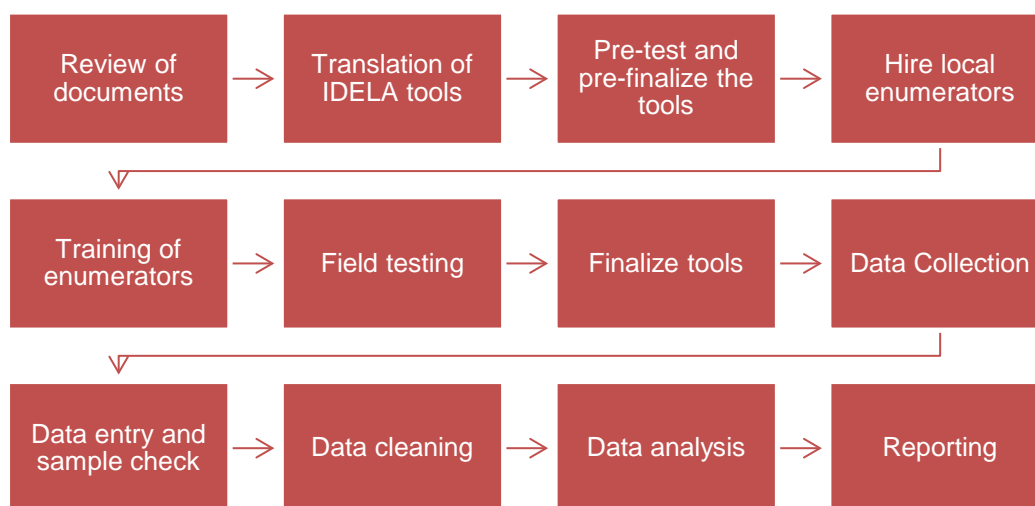
2.3 Study Procedure

The IDELA items were translated and contextualized by Save the Children's education and MEAL staff. RIDA worked on the tools and data collection guidelines received from SCN to further shape and develop to meet the local context. The IDELA tool was translated into local language (Tamang).

An intensive five-day training conducted jointly by Save the Children and RIDA during last week of May and first week of June. The training was aimed at building capacity of the locally hired enumerators to administer the IDELA tools by fulfilling necessary ethical requirements. The pre-testing activity carried out during the training period provided the assessors a familiarity of the tools use and inputs for tools revisions.

The data collection in Kavre started on June 6, 2016 and completed on June 22, 2016. Local enumerators/assessors hired for the data collection were regularly monitored and supervised by RIDA supervisors. Upon completion of the field activity data were entered, checked and cleaned during July, 2016 and shared with SCN. RIDA conducted analysis of the data based on the agreed analysis framework.

Chart 3. Study Procedure



2.4 Limitations

There were some limitations during the study. It was rainy season as a result it was difficult for the supervisors and enumerators to reach to remote sites, and most of the community people were heavily engaged in farming activities. Age group and randomness was not considered for program schools. The program implemented schools in Kavre had very few ECCD enrolled children available for the test. As a result all students (regardless of their previous ECCD experience) were included for the study. Due to unavailability of the caregivers/parents of the IDELA administered children all of them could not be covered in the study. Control VDCs and schools were identified mostly based on the suggestions provide by the DEO on matching the characteristics with the program implemented VDCs. Apart from these no other aspects were considered. In a plain observation of enumerators and supervisors, the socio-economic condition of project sites was weaker than control sites.

3. Study Results

This section presents key findings from the study including details about home environment, learning environment, IDELA results, and factors associated with the IDELA results.

3.1 Home environment

Child characteristics

The average age of the child in project schools was 4 years and 4 months. The children in control ECCD centers were significantly younger (4.1 years compared to 4.3) than treatment groups. Among total students included in the study, the proportion of girls was slightly higher. Around 52 percent of children were girls and around 48 percent were boys. It also indicates that there were more girls attending public ECCD centers. There was no significant difference in the proportion of girls between control and treatment groups.

Table 5. Child characteristics

	Control	Treatment	Significant difference
Child is Female (%)	54.5	52.4	
Child age (years)	4.1	4.3	0.006**

Source: IDELA Baseline Study Data, 2016

Family characteristics

On an average, mothers were 30 years old and fathers were of 33 years old. The main home language in treatment group was Tamang for majority households. There were more proportion of families in control (53% compared to 42% in treatment) with Nepali as a language spoken at home. The proportion was also significantly different.

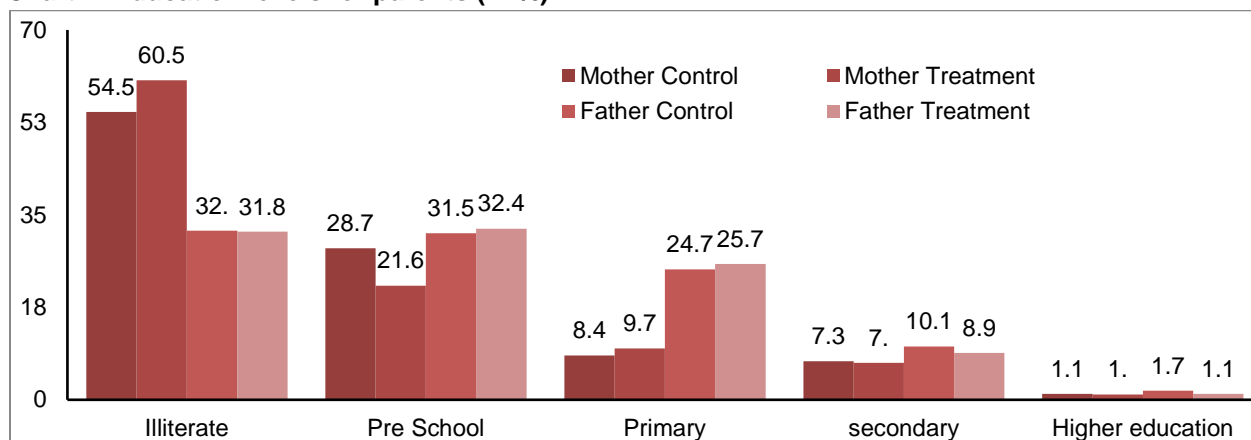
Table 6. Family characteristics by intervention

	Control	Treatment	Significant difference
Mother age (years)	28.7	29.6	
Mother is literate (%)	62.9	52.0	
Father age (years)	31.7	33.0	
Father is literate (%)	87.1	86.3	
Home language as Nepali (%)	52.8	42.7	p=.054~

Source: IDELA Baseline Study Data, 2016

Fathers were more literate compared to mothers. In project VDCs, the proportion of literate mothers was 52 percent while the proportion of literate father was 86 percent. However, there was no significant difference in the parental education for control and treatment groups.

Chart 4. Education levels for parents (in %)



Source: IDELA Baseline Study Data, 2016

Number of children

On an average, there were around two children below six years in the family. There were only 1 children of age 6-12, and around 4 household members over 17. There was no significant difference between treatment and control groups in terms of how many children are there in the family. The treatment groups had slightly more number of household members above 17 years of age.

Table 7. Number of family members

	Control	Treatment	Significant difference
Average number of household members under 6 years of age	1.67	1.57	
Average number of household members of the age group 6-12 years	1.23	1.41	
Average number of household members above the age of 17 years	3.84	4.30	p=.072~

Source: IDELA Baseline Study Data, 2016

3.2 Home Learning Environments

The home learning environment includes availability of resources/tools that contribute to home learning and activities.

Resources

The availability of materials among children was quite low, particularly for books, magazine, and materials that are directly related to learning. Among treatment children, around 47 percent had story book and 42 percent had textbook. Toys were most commonly available materials. In project schools, around 76 percent households had homemade toys followed by 69 percent with toys bought from market. Children in treatment had larger access to story book, textbook, magazine,

puzzle toys, and hand-eye coordination toys while children in control had better access to homemade, store-bought, and shapes toys.

Table 8. Materials and Resources useful for children

Households having the materials	Control	Treatment	Significant difference
Storybook (%)	25.4	47.3	p=.000**
Textbook (%)	32.4	42.2	p=.055~
Magazine (%)	6.8	14.1	p=.028*
Religious book (%)	10.7	23.2	p=.001**
Coloring book (%)	22.0	21.5	
Comic book (%)	24.3	29.7	
Homemade (%)	62.9	50.8	p=.020*
Store-bought (%)	61.8	45.7	p=.002**
Household objects (%)	80.3	75.5	
Outside objects (%)	66.3	68.6	
Drawing (%)	46.1	42.2	
Puzzle (%)	5.1	11.4	p=.028*
Hand-eye coordination (%)	7.3	13.0	p=.073~
Shapes (%)	23.7	15.7	p=.055~
Numbers (%)	24.9	28.6	
Other (%)	18.8	22.2	

Source: IDELA Baseline Study Data, 2016

Activities

Many children have received support from their parents. Around 6-8 in 10 children have received support from the parents in learning activities such as reading, identifying numbers, identifying letters etc. In terms of activities, there is not much difference between control and treatment except the control was better than treatment in terms of taking children outside house.

Table 9. Engagement of children in key learning activities

% of families who are engaged in these activities with their children	Control	Treatment	Significant difference
Reads to child (%)	83.7	81.0	
Tells stories (%)	62.9	64.3	
Sings (%)	58.9	65.9	

% of families who are engaged in these activities with their children	Control	Treatment	Significant difference
Takes child out (%)	78.1	67.0	p=.018*
Plays with child (%)	66.3	67.6	
Draws with child (%)	64.6	69.7	
Teaches new things (%)	66.3	69.7	
Teaches letters (%)	80.9	83.2	
Teaches numbers (%)	80.3	80.5	

Source: IDELA Baseline Study Data, 2016

In general, mothers were heavily engaged in conducting activities for children compared to father and others (grandparents, brothers etc). Mothers in treatment were particularly better than mothers in control in teaching new things, teaching letters, and teaching numbers. While there were significantly more proportion of fathers teaching new things to children in control compared to treatment. Interestingly, others (grandparents, brothers/sisters, and other family members) were highly engaged in conducting activities with children in control compared to treatment. In a quick observation, treatment had more proportion of mothers conducting activities with children while control had more proportion of other family members engaged.

Table 10. Activities with children (by various family members)

% of families who are engaged in these activities with their children	Mom		Dad		Others	
	Control	Treatment	Control	Treatment	Control	Treatment
Reads to child (%)	47.8	48.1	12.9	13.5	25.2	21.6
Tells stories (%)	36.5	40.0	13.5	9.2	13.5	15.7
Sings (%)	42.1	47.0	9.6	4.9	10.1	14.0
Takes child out (%)	64.0	58.4	6.7	8.1	7.9	3.8
Plays with child (%)	37.6	43.2	10.7	9.7	20.8	17.8
Draws with child (%)	35.9	48.10	8.4	9.7	20.8	14.0
Teaches new things (%)	33.7	53.5	16.3	6.5	17.4	11.4
Teaches letters (%)	43.8	58.9	10.7	8.7	26.9	17.8
Teaches numbers (%)	42.1	60.5	15.7	11.4	24.1	14.0
Hug (%)	93.3	77.8	3.4	10.8	5.0	4.3

Source: IDELA Baseline Study Data, 2016

* The dark shaded areas indicate the figures with significant difference between treatment and control groups (p<0.10).

Protective factors

Mothers were clearly spending more time with mothers compared to fathers and other family members. There was some difference between control and treatment groups particularly in terms of time spent with child by mother and father. The control groups were slightly better. The average time spent by mother in control group was 3.49 hours compared to 2.99 hours for treatment. Similarly, the time spent by father was 2.0 hours in control compared to 1.7 hours in treatment. The older children available in the family were also heavily engaged in taking care of younger child who attends ECCD. On an average, they spent around 3 hours per day with the ECCD child. The child was also kept along for 30-45 minutes a day. There was no significant difference between treatment and control groups in terms of time spent by child to take care of child, and child kept alone.

Table 11. Difference between amount of time spent engaging kids

	Control	Treatment	Significant difference
Mother time with child (hours)	3.39	2.99	p=.038*
Father time with child (hours)	2.05	1.67	p=.017*
Child care of child (hours)	3.11	2.93	
Child alone (hours)	0.49	0.60	
% of households where children receive hug (%)	97.1	89.1	P=0.003**

Source: IDELA Baseline Study Data, 2016

Including 'hug' as one of the factors contributing to protection, almost 9 in 10 children received such care from their family members. There were significantly lower proportion of child receiving that in treatment compared to control ECCD centers.

Negative child care practices

The ECCD children had to face number of adversities. The practice of yelling and hitting children was very common. Around 60 percent children were yelled as well as hit on certain occasions. Similar to other activities with children, mothers were also much more ahead compared to fathers and other members of family in hitting child. Interestingly, while larger proportion of fathers preferred to yell (than hit), mothers were mostly hitting children than yelling at them. There was no significant difference between control and treatment groups in terms of any of the negative child care practices mentioned below.

Table 12. Prevalence of yelling at, hitting children, and child neglect score

% of families who are engaged in these activities with their children	Control	Treatment	Significant difference
Yells (%)	58.4	61.1	
Hits (%)	67.8	63.2	
Mom Yells (%)	45.8	39.8	
Mom Hits (%)	51.4	47.5	

% of families who are engaged in these activities with their children	Control	Treatment	Significant difference
Dad Yells (%)	11.9	7.7	
Dad Hits (%)	5.1	6.7	
Others Yell (%)	2.3	2.8	
Others Hit (%)	1.7	3.3	
Child Neglect Score ³	3.15	3.05	

Source: IDELA Baseline Study Data, 2016

Family support linked indexes

For simplicity of analysis, the study team created five different indexes to assess the status of learning resources, learning activities, socio-economic status, and protection as well as adversities. While there was significant difference in the activity index⁴ between control and treatment groups, favoring the control group. The resource index⁵ was almost equal for both groups. There was also no significant difference between the treatment and control group in terms of socio-economic status index⁶, learning resource index, protective index⁷, and adversity index⁸.

Table 13. Indexes

Indexes	Control	Treatment	
Social Economic Status	4.24	4.15	
Learning Resource Index	5.52	5.97	
Activity Index	6.63	5.46	p=.000**
Protective Index	4.60	4.52	
Adversity	5.39	5.53	

Source: IDELA Baseline Study Data, 2016

3.3 ECCD participation and expectations

³ Child neglect score is calculated combining hours the child is alone, and hours the child is looked after by another child.

⁴ The activity index was calculated based on the activities conducted to children by father, mother, and others.

⁵ The learning resource index was calculated based on the materials and resources to support learning available for the children's home.

⁶ The socio-economic status index was calculated by adding key socio-economic details such as availability of separate room to sleep for children, separate kitchen, living room, toilet, electricity facility, television, refrigerator, computer, motorbike, and improved breed of cow/buffalo.

⁷ Protective index is calculated of availability of clinic nearby, participation in support groups, remittance during last 3 months, adult to children ratio, prevalence of practice of hugging and hitting children, and time spent by child with mother and father.

⁸ The adversity index is calculated by using variables such as occurrence of earthquake, fire, landslide, flood, living outside home, loss of job, loss of livestock, family members in prison, food security, punishment to children, and depression.

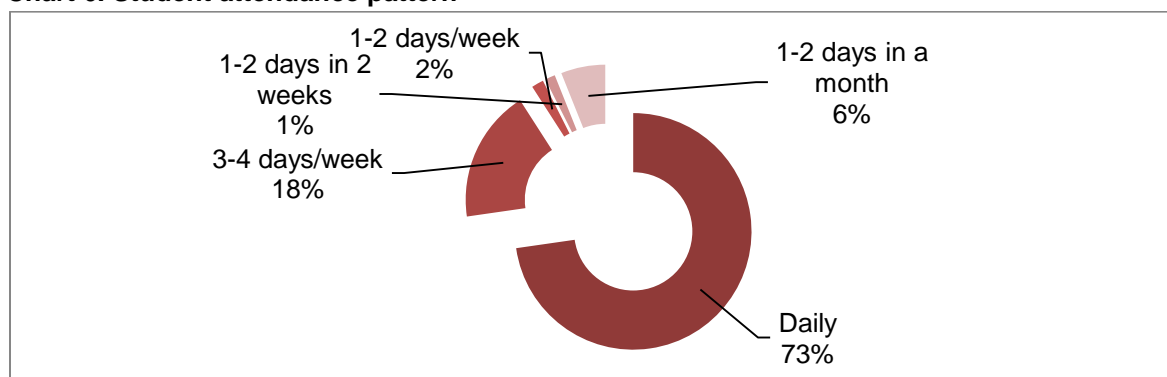
ECCD experience

In Kavre, almost half proportion of the ECCD children had previous ECCD experience. It indicates towards tendency of enrolling children in ECCD in lower age, and continuing for multiple years till they are of the age to qualify for enrollment in Grade 1. In aggregate, around 27 percent were in ECCD for last two years, and there were around three percent with children in ECCD for last 3 years. There was no significant difference between control and treatment groups in terms of having children with ECCD experience.

ECCD attendance

In aggregate (for control as well as treatment), around three quarters of children (73%) were regularly attending ECCD centers. One in five attended 3-4 days a week, while there were around six percent children who only participated 1-2 days in a month. On the whole, there was no difference in student attendance between control (4.53) and treatment (4.48).

Chart 6. Student attendance pattern



Source: IDELA Baseline Study Data, 2016

ECCD facilitator (training)

The ECCD children in control ECCD centers had better access to trained facilitators compared to treatment. While there were 73 percent children with trained ECCD facilitators (receiving government training) in treatment, the proportion was 83 percent for control. In terms of trainings other than government training, there were almost same proportion of facilitators who received trainings from other source in control (52%) and treatment (59%).

ECCD structure

The classes were structured similar to previous days in more number of ECCD centers in treatment compared to control. While the classes were structured similar to that of other days in 84% cases for treatment, it was only 64% for control groups. The classes are more uniform and organized in treatment ECCD centers.

Table 14. ECCD practices

	Control	Treatment	Significant difference
Proportion of children with previous ECCD Experience (%)	49.4	46.5	
ECCD Attendance Rate (rating)	4.53	4.48	

	Control	Treatment	Significant difference
Proportion of children with facilitators having formal government ECCD Training (%)	82.6	73.0	p=.027*
Proportion of children with ECCD classes organized in same structure as of yesterday (%)	63.5	83.5	p=.012*

Source: IDELA Baseline Study Data, 2016

3.4 Child Results

This section describes children’s performance on the direct child assessment, with a focus on differences between the skills of children in the two study groups. Total domain scores are calculated by adding the weighted score of each item in the domain so that all items contribute equally to the domain score⁹. The total IDELA score is calculated by adding the weighted score of each item and dividing by the total number of items so that all items contribute equally to the total score¹⁰. Therefore the analyses presented below display the proportion of IDELA questions answered correctly out of the all possible correct answers.

Motor skills

The motor scores were on the lower side. For project schools, the motor score was 19.3 percent for boys, and 18.8 percent for girls. Children had better score in fine motor task of drawing compared to fine motor task of folding a paper. There was no significant difference in score related to motor skills for control and treatment groups, and also for girls and boys.

Table 15. IDELA motor skills

Items & Scores	Control		Treatment	
	Boys	Girls	Boys	Girls
Draw a person (%)	34.7	29.7	26.5	28.8
Fold paper (%)	11.1	10.9	11.9	8.8
Total Motor Score (% Correct)	22.9	20.4	19.3	18.8

Source: IDELA Baseline Study Data, 2016 (403 observations)

Emergent Numeracy

The emergent numeracy tests included seven different sub-tests to assess the basic numeracy skills among children. The average numeracy score for treatment was 28.5 percent for boys and 27.2 percent for girls (compared to 32.0% for boys, and 25.8% for girls in control ECCD centers). The children score highest on measurement (identifying which one is larger and smaller), and lowest in identifying numbers. The scores were also poor for completion of puzzle. Within

⁹ For Nepal, the IDELA test was revised for motor skills. Two tests: copying a shape (related to direct motor skills), and hopping (related to gross motor skills) were dropped.

¹⁰ Due to the difference in administration style between the direct child assessment items and the enumerator reported learning approaches items, the learning approaches items are not included in the total IDELA score.

emergent numeracy skills, there was no significant difference by types of ECCD (control or treatment) but there was a significant difference by gender (girls/boys). In aggregate, boys were scoring higher than girls in numeracy skills.

Table 16. IDELA numeracy skills

Items & Scores	Control		Treatment	
	Boys	Girls	Boys	Girls
Measurement (%)	79.4	76.1	78.1	75.7
Sorting (%)	19.6	15.1	21.4	21.8
Shape ID (%)	42.2	34.0	41.8	35.9
Number ID (%)	7.6	6.1	4.1	4.9
One-to-one correspondence (%)	22.1	12.7	15.8	13.3
Simple operations (%)	42.2	25.1	28.5	27.0
Puzzle completion (%)	12.4	10.2	8.2	10.3
Total Emergent Numeracy (% Correct)	32.0	25.8	28.5	27.2

Source: IDELA Baseline Study Data, 2016 (403 observations)

Emergent Literacy

There were four sub-tests included within the emergent literacy. On the whole, the scores on emergent literacy also remained on lower side. There was significant difference between control and treatment in emergent literacy score: control groups (24.3%) were better than treatment groups (17.8%). However, there was no difference in score for boys and girls. The children scored highest marks in print awareness, and lowest marks in phonemic awareness.

Table 17. IDELA literacy skills

Items & Scores	Control		Treatment	
	Boys	Girls	Boys	Girls
Expressive vocabulary (%)	17.5	13.7	14.8	10.8
Print awareness (%)	43.2	42.8	36.8	36.7
Letter ID (%)	15.1	14.5	6.2	7.7
Phonemic awareness (%)	3.6	4.6	1.0	2.3
Writing (%)	34.9	36.6	28.4	29.0
Oral comprehension (%)	38.2	26.2	26.3	27.4
Total Emergent Literacy (% Correct)	24.9	22.3	18.6	18.1

Source: IDELA Baseline Study Data, 2016 (403 observations)

Socio-emotional development

The social-emotional development involved five test items. The scores remained on the lowest side compared to motor skills, emergent numeracy, and emergent literacy. The children scored

highest on personal awareness related test and lowest on emotional awareness. There was no difference in scores on socio-emotional development by ECCD type (control and treatment) and gender (girls and boys).

Table 18. IDELA socio-emotional skills

Items & Scores	Control		Treatment	
	Boys	Girls	Boys	Girls
Self-awareness (%)	46.4	48.0	46.0	42.1
Social connections (%)	20.9	17.9	21.6	39.6
Emotional awareness (%)	3.5	1.7	1.5	1.2
Empathy (%)	7.2	6.3	5.2	4.3
Conflict resolution (%)	21.2	19.4	21.6	17.5
Total Socio-emotional (% Correct)	18.9	17.9	17.9	15.6

Source: IDELA Baseline Study Data, 2016 (403 observations)

Executive functioning

In addition to the core domains, the child assessment also included items related to executive functioning. These items focuses on how children process information as opposed to learned skills like letter or number identification, and underlie children's ability to learn new information. The test included sub-tests on short-term memory, and inhibitory control. The students scored higher on short term memory, and lower on inhibitory control. There was no significant difference in executive functioning score by ECCD type (control and treatment) and gender (girls and boys).

Table 19. IDELA executive functioning skills, by group and gender

Items & Scores	Control		Treatment	
	Boys	Girls	Boys	Girls
Short-term memory (%)	45.8	44.8	45.6	40.0
Inhibitory Control (%)	10.8	12.3	8.5	9.5
Total Executive Function (% Correct)	28.3	28.6	27.0	24.8

Source: IDELA Baseline Study Data, 2016 (403 observations)

Approaches to Learning

In order to measure children's learning approaches (i.e., the way they approach complicated problems) assessors were asked to rate children on a number of dimensions immediately after the assessment was completed. Children were rated on a scale from 1=Almost never; 4=Almost always. The approaches to learning were excluded calculation of aggregate IDELA score. The aggregate scores on approach to learning was 61.9 percent for boys and 64.4% for girls in project ECCD centers (compared to 66.4% for boys, and 64.0% for girls in control ECCD centers). There was no significant difference between treatment and control, and girls and boys in terms of score on approaches to learning.

Table 20. IDELA Approaches to learning skills

Items & Scores (in rating scale)	Control		Treatment	
	Boys	Girls	Boys	Girls

a) Did the child pay attention to the instructions and demonstrations throughout the assessment?	2.82	2.60	2.58	2.57
b) Did child show confidence when completing activities; did not show hesitation.	2.78	2.56	2.71	2.52
c) Did the child stay concentrated and on task during the activities and was not easily distracted?	2.76	2.56	2.60	2.51
d) Was child careful and diligent on tasks? Was child interested in accuracy?	2.67	2.52	2.56	2.60
e) Did child show pleasure in accomplishing specific tasks?	2.68	2.64	2.75	2.68
f) Was child motivated to complete tasks? Did not give up quickly and did not want to stop the task?	2.81	2.55	2.65	2.64
g) Was the child interested and curious about the tasks throughout the assessment?	2.71	2.56	2.57	2.59
Total Approaches to Learning (% Total)	66.4	64.0	61.9	64.4

Source: IDELA Baseline Study Data, 2016 (403 observations)

Total IDELA

The total IDELA score was calculated by combining scores on motor skills, early literacy, early numeracy, socio-emotional development, and executive function¹¹. The total IDELA score also remained on a lower side. In a percentage scale, the aggregate IDELA score (in%) for project ECCD center was 20.1 (21.2% for boys and 20.0% for girls). The total IDELA score was 23.9 percent for control ECCD centers. In the aggregate score, there was significant difference by ECCD type (control and treatment), and gender (girls and boys). The control ECCD centers had better IDELA score compared to treatment ECCD centers, and boys had better scores than girls.

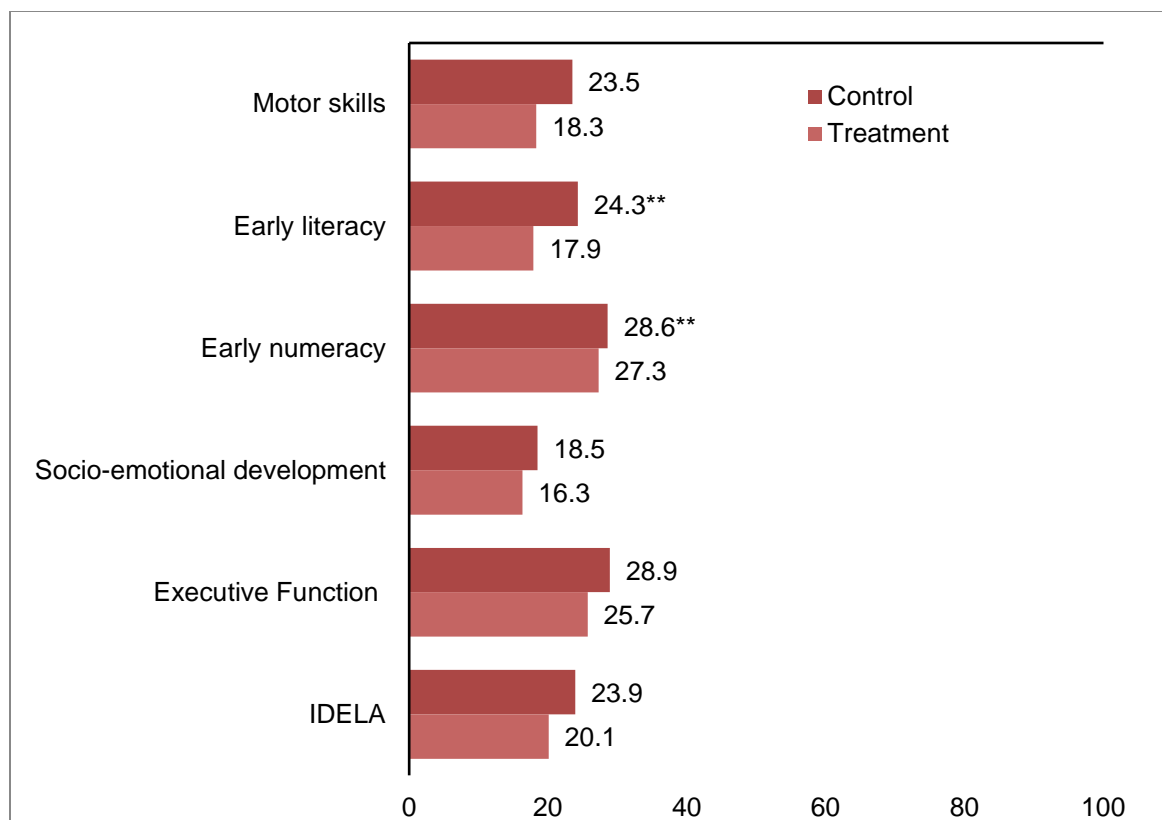
Table 21. IDELA key indicators mean scores, by group and gender

Items & Scores	Control		Treatment		~ Type * Gender
	Boys	Girls	Boys	Girls	Main effects
Motor skill (%)	22.9	20.4	19.3	18.8	
Early literacy (%)	24.9	22.3	18.6	18.1	Type: 0.000**
Early numeracy (%)	32.0	25.8	28.5	27.2	Gender: 0.009**
Socio-emotional development (%)	18.9	17.9	17.9	15.6	
Executive Function (%)	28.3	28.6	27.0	24.8	
IDELA Total (%)	24.8	21.9	21.2	20.0	Type: 0.03* Gender: 0.09~

Source: IDELA Baseline Study Data, 2016 (403 observations)

Chart 7. Average total IDELA scores, by study group

¹¹ To calculate a total IDELA proportion correct for each direct child assessment item was added together and divided by the total number of items. Given that the learning approaches score was obtained through assessor observation, it is not included in the total IDELA score.



Source: IDELA Baseline Study Data, 2016 (403 observations)

3.5 Connection between home environments and children’s development

This section tries to analyze possible connection between various factors (including child's characteristics, home environment, and learning environment) and children's learning and development scores. The IDELA score is compared with other factors using multivariate regression controlling for previous ECCD experience, child sex, child's age, and family size.

Table 22. Connections between IDELA and home environment

Factors	Is there any connection?	Influence of controlled factors	Statistical values
Home language	Children speaking Nepali (rather than Tamang) score high.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones Children having ECCD experience obtain high IDELA scores 	Language (b = .02, p = .07) Age (b = .05, p = .000) ECCD experience (b = .03, p = .01)

Factors	Is there any connection?	Influence of controlled factors	Statistical values
Caste/Ethnicity	Janajati or Dalit (Chhetri or others) children obtain significantly low IDELA score.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones. Children having ECCD experience obtain high IDELA scores. 	Janajati/dalit (b = -0.06, p = 0.00) Age (b = .05, p = .000) ECCD experience (b = .03, p = .01)
Socio Economic Status	With increasing socio-economic status index children get high IDELA scores.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones. Children having ECCD experience obtain high IDELA scores. 	SES Index (b = .006, p = .059) Age (b = .05, p = .000) ECCD experience (b = .03, p = .01)
Resource Index	With increasing resource index children get high IDELA scores.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones Children having ECCD experience obtain high IDELA scores 	Resource index (b = .04, p = .01) Age (b = .05, p = .000) ECCD experience (b = .028, p = .01)
Activity Index	With increasing activity index children get high IDELA score.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones Children having ECCD experience obtain high IDELA scores 	Activity Index (b = .003, p = .04) Age (b = .052, p = .000) ECCD experience (b = .028, p = .01)
Parental expectations (whether they want their children to complete secondary school)	Parental expectations <i>do not</i> predict (has no effect on) IDELA score.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones Children having ECCD experience obtain high IDELA scores 	Parental expectation (b = .009, p > .1) Age (b = .052, p = .000) ECCD experience (b = .028, p = .01)

Factors	Is there any connection?	Influence of controlled factors	Statistical values
Parental education	Fathers education significantly predicts IDELA score while mother's education does not. It is positively associated with the score.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones Children having ECCD experience obtain high IDELA scores 	Father's education (b = .018, p = .004) Mother's education (b = .009, p > .15) Age (b = .056, p = .000) ECCD experience (b = .029, p = .02)
Protective factors (Index)	Protective factors significantly yet marginally predicts IDELA score. It is positively associated.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones Children having ECCD experience obtain high IDELA scores 	Father's education (b = .009, p = .09) Age (b = .056, p = .000) ECCD experience (b = .029, p = .028)
Adversity factors (Adversity index)	Adversity <i>does not</i> predict IDELA score.	<ul style="list-style-type: none"> Older children score significantly higher than younger ones Children having ECCD experience obtain high IDELA scores 	Adversity index (b = .003, p = 0.79) Age (b = .056, p = .000) ECCD experience (b = .028, p = .028)

Source: IDELA Baseline Study Data, 2016

Based on the analysis table presented above, the factors that are associated with higher IDELA score are as follows:

Table 22. Factors associated with IDELA score

Factors that are positively associated (factors with p<0.05)	What that explains?
Children's age	An unit increase in the child's age is associated with 5.6 percentage points increase in the IDELA score.
Children's ECCD experience	A child having ECCD experience (instead of not having it) is associated with 3 percent higher IDELA score.
Caste/ethnicity	Being a children from dalit and janajati is associated with 6 percentage points decrease in the IDELA score.
Resource Index	An unit increase in resource index (learning resources) for a family of a child is associated with 0.4 percentage points increase in IDELA score.

Factors that are positively associated (factors with $p < 0.05$)	What that explains?
Activity Index	An unit increase in activity index (learning activities) for a family of a child is associated with 0.3 percentage points increase in IDELA score.
Fathers' education	An unit increase is father's education is associated with 1.8 percentage points increase in the IDELA score for the child.

Source: IDELA Baseline Study Data, 2016

4. Conclusion & Recommendations

This section concludes the study by summing up the findings, and also provides some inferences for the project to utilize as a reference.

4.1 Conclusion

This is the first time that the IDELA tools have been used systematically to a sizable proportion of ECCD children in Nepal. The baseline study using IDELA tools conducted in Kavre district clearly indicates that the existing level of child learning and development is poor. The IDELA score for children is mediocre (22.10%). The girls have lower level of learning and development compared to boys as indicated by significant difference in their IDELA score, driven primarily by the emergent numeracy domain. Interestingly, the IDELA score was lower for project ECCD centers than control ECCD centers. It is possibly due to the fact that the project was targeted to very poor areas with marginalized settlements, and schools with poor infrastructures.

The availability of learning resources was low for children while their participation in activity was quiet high. However, the activities were mostly led by mothers with very limited participation of father and other family members. There are some factors with significant associations to IDELA score. The availability of learning resources and activities together with parental education (especially that of father) contributed to the score. In addition, a combination of protective factors (consisting of parental time with child, availability of support networks) also had some influence on IDELA score. Save the Children Nepal has an opportunity to synthesize and utilize the findings from this study to inform the project design and project implementation strategies.

4.2 Recommendations

RIDA recommends Save the Children and its partners to review the study findings, and have detailed discussions and brainstorming to generate possible inferences for the project. Nevertheless, the study team has identified some inferences as follows:

- **Focus on the skills/learning areas with low score**
While IDELA scores are mostly low on almost all tests, the scores are particularly low for motor skills, and for some particular tests such as expressive vocabulary, identification of letters, phonic awareness, identification of numbers, sorting, puzzle, empathy, and emotional awareness. The project is advised to focus on the skills with low scores.
- **Focus on learning activities**
Support family members especially father and other family members to increase number of learning activities for children. The learning activities needs to be better organized and better targeted.
- **Playful resources**
Make playful learning resources available to children with purposive orientation to parents and other caretakers on how to utilize them for child's learning and development

- **Promote activity with father, and other family members**
Since activities conducted by father and other family members had more effect on children's learning, there is a need to encourage them to spend more time with children with learning activities.
- **Focus on girls**
Since the IDELA scores are low for girls, in ECCD centers and also at home, there is a need to focus on having adequate learning activities for girls.

References

CBS (Central Bureau of Statistics). (2007). *Nepal Living Standards Survey 2006/07, Statistical Report*. Kathmandu: Central Bureau of Statistics

DOE (Department of Education). (2014). *School Education Statistics Flash - I Report*. Kathmandu: DOE.

MOE (Ministry of Education).(2009). *School Sector Reform Plan 2009- 2015*. Kathmandu: Ministry of Education.

MOE (Ministry of Education). (2013). *ICT in Education Master Plan 2013-2017*. Kathmandu: Ministry of Education, Government of Nepal

MOF (Ministry of Finance). (2015). *Budget Speech FY 2015/16*. Kathmandu: Ministry of Finance

Save the Children. (2016). *International Development and Early Learning: Adaptation and Administration Guide*. Save the Children.

Save the Children. (2015). *Afghanistan ECCD Study*. Kabul: Save the Children Afghanistan.

Annex 1: List of schools covered

Name of ECCD center	Name of community	ECCD Type
1. Pokra ECCD	Bhimkhori	Control
2. Shree Mahakali ECCD	Naya Gaun	Control
3. Radha Krishna Ghanshyam PS	Mahadevsthan	Control
4. Shree Kanpur Bal bikash kendra	Kanpur	Control
5. Shree Bhairav Secondary School	Gokule	Control
6. Shree Bhumesthan Bal Bikash	Mangaltar	Control
7. Shree Bhimen ECCD	Gairibasuna	Control
8. Shree Devi Higher Secondary School	Sikhar Ambote	Control
9. Shree Gokule H S ECCD	Gokule	Control
10. Kali Davi P.S. ECCD	Mahadevstan	Control
11. Jugeswar ECCD Center	Bhimkhani	Control
12. Vimeshwor Secondary School	Fulbari	Control
13. Shree Dedi thumka H S	Mahadevstan	Control
14. shree gulmeswori Eccd	Nayagau	Control
15. Satmul ECCD	Kanpur	Control
16. Rakta Kali ECCD	Kanpur	Control
17. Setidevi ECCD	Kanpur	Control
18. Tinpiple ECCD	Sisakhanai	Treatment
19. Shree Janta Primary School	Fulbari	Treatment
20. Chhabaktiswar ECCD	Ghartichhap	Treatment
21. Chandrasurya ECCD	Foksingtar	Treatment
22. Aajad ECCD Center	Bankhu	Treatment
23. Shree Shanti Primary School	Shanlipur	Treatment
24. Kali Devi P.S. ECCD	Patlekhhet	Treatment
25. Saraswati ECCD	Deurali	Treatment
26. Shree Buddhakhani ECCD	Buddhakhani	Treatment
27. Shree Himalaya ECCD	Sipali	Treatment
28. Bal Chetan Primary School	Budakhani	Treatment
29. Amarnath P.S.	Katunge	Treatment

Name of ECCD center	Name of community	ECCD Type
30. Sri Bhumeshwor L.S.S	Budhakhani	Treatment
31. Shree Champhadevi School	Champagaun	Treatment
32. Suryajyoti	Banakhu	Treatment
33. Jana Kalyan ECCD	Khasikhanda Municipality	Treatment
34. Mahankal	Patleket	Treatment
35. Shree Janakalyan HSS	Ghartichap	Treatment
36. Dibyajyoti ECCD	Budhakhani	Treatment

Annex 2: List of assessors

S.N	Name	Sex	Contact
1	Kumari Lama	Female	9818243230
2	Sujan Tamang	Male	9860216670
3	Milan Lama	Male	9860977534
4	Niramala Laa	Female	9803861171
5	Pragati Lama	Female	9802097577
6	Premsang Lama	Male	9818365324
7	Sumina Tamang	Female	9808295522
8	Roshan Karki	Male	9849444927
9	Bijaya Lama	Female	9849014789