SCHOOL READINESS REPORT 2080 BS (2023/24 AD)

Assessment of Grade 1 Children's School Readiness Based on Early Learning and Development Standards (ELDS)





Government of Nepal
Ministry of Education, Science and Technology

Education Review Office

Sanothimi, Bhaktapur

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FOREWORD

The Government of Nepal recognizes the importance of the Early Childhood Education and Development (ECED) and has made significant investment in the sector in recent years. As a result, an increase in ECED enrollment has been realized in the last few years. While enrollment rates provide crucial information on access to ECED, they do not adequately measure the outcomes of ECED Programmes. Therefore, assessments of ECED programs are critical, as the evaluation of children's readiness in ECED gives a broader idea on the effectiveness of these programs. Moreover, it also provides valuable policy input to shape formal education according to the needs of the children transitioning from ECED.

To ensure that the quality of ECED is effective and that children are ready for Grade 1, the Education Review office (ERO) began the assessment of Grade 1 children as a proxy measure for the effectiveness of the outcomes of ECED from the year 2017 AD. The assessment framework was developed based on Early Learning and Development Standards (ELDS) for children aged 4 (48-60 months). Meanwhile, the background survey of ECED is collected based on minimum standards and existing policies and directives. Throughout the years, the assessment framework has undergone continuous refinement to align it with national and international practices.

This report is developed based on the assessment conducted at the beginning of the academic year 2080 BS (2023/24 AD) for Grade 1 children. Following the feedback from experts, the cut scores were reviewed, and this has also been documented in detail in this report. While developing the cut scores we also focused on aligning the tool with internationally adopted and tested methods.

Numerous organizations and individuals have provided their valuable input at various stages. UNICEF Nepal, with overarching support from ECD Specialist Dr. Dipu Shakya, has supported the development of this assessment from the inception phase, both technically and financially. UNICEF has seconded technical personnel and stationed them at the ERO. This has been instrumental in conducting the assessment and preparing this report jointly with the ERO team. We thank UNICEF for this contribution.

Before the release of this report, the ERO had organized several discussions and consultations with concerned stakeholders and experts. The feedback received from experts in such forums has been reflected, and enabled the report to be comprehensive. Journals and research papers concerning ELDS have been referenced to ensure that the assessment and reporting has been carried out as per the established norms and practices. I extend my sincere gratitude to Kenji Kitamura, Shreeya Shreeraman and Mahesh Dahal who while stationed at the ERO, played a crucial role in developing the tool and ensuring the methodological rigor. Directors of ERO, Yubraj Adhikari, Narayan Prasad Jha, Hari Prasad Niraula, Pramila Bhakati, Section officer, Nisha Oli and former Section officer Renuka Adhikari and my whole team for their inputs and support in ELDS.

The support and guidance received from the Honorable Minister Bidhya Bhattarai and Education Secretary Dr. Deepak Kafle have been instrumental in finalizing this report. I also wish to extend my gratitude to the previous Director General, Mr. Chandra Kanta Bhusal. In addition, the inputs and guidance from ECED experts, Dr. Kishor Shrestha and Dr. Meenakshi Dahal, have been fruitful in ensuring that the results and finding are aligned with the relevant national policies and overall wellbeing of the children of Nepal.

I am convinced that the expertise and dedication of the ERO team has contributed to conducting this study and will be a milestone in the policy reform and improvements in the ECED program. The ERO is open to discussion regarding the findings, the implications of the report, policy suggestions, improvements and changes. At the ERO we believe that assessment ensures and strengthens the education system.

Jayaram Adhikari Director General

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LIST OF ABBREVIATIONS

ECED Early Childhood Education and Development

ECE Early Childhood Education

ELDS Early Learning and Development Standards

MoEST Ministry of Education, Science and Technology

ERO Education Review Office

CEHRD Center for Education and Human Resource Development

PPS Probability Proportionate to Size

EMIS Educational Management Information System

NER Net Enrollment Rate

GER Gross Enrollment Rate

SEE Secondary Education Examination

NMICS Nepal Multiple Indicator Cluster Survey

SMC School Management Committee

TPD Teacher Professional Development

LKG Lower Kindergarten

UKG Upper Kindergarten

SDG Sustainable Development Goals



EXECUTIVE SUMMARY

The Government of Nepal has made considerable investments in Early Childhood Education and Development (ECED), with a focus on holistic child growth. While much has been achieved at the policy development and implementation level, there is a need to clarify the outcomes of ECED programs. The purpose of holistic development and school readiness among children as set by the ECED curriculum (2077BS/2020AD) and Early Learning and Development Standards (ELDS 2069BS/2012AD) has not previously been set out. Thus, the Education Review Office (ERO) initiated the status assessment of ECEDs and the early learning and development of children in 2017 at the Grade 1 entry level using an assessment framework developed through a consultative process between experts and relevant stakeholders and the senior team at the ERO. This assessment provides an opportunity to assess children's learning and development status based on the ELDS and serves as proxy to assess the readiness of children when they enroll at Grade 1 with a nationally representative sample selected using a stratified randomized sampling method.

The objectives of this study are:

- a) To find children's developmental and learning status at grade 1 (at the entry level) in reference to the Early Learning and Development Standards (ELDS).
- b) To identify the proportion and characteristics of children enrolled in grade 1, who are at developmental risk.
- c) To identify the quality and characteristics of ECED programs as per the ECED minimum standards.
- d) To examine relationships between characteristics of ECED programs and children's development and learning status to generate evidence for program improvement.

This report is based on the fifth round of the assessment conducted during June-July of 2023. Statistically, a total of 245 ECED Centers were required to conduct the assessment and report the findings at the national and province level. However, considering that some schools might not be available during the assessment period, an additional 35 schools were randomly sampled, and the weights were adjusted accordingly. A total of 280 schools were finally sampled for the assessment out of which enumerators reached 274 schools and 3,978 children in total. Of these 3,978 children, 1,189 children—27.85% (of children reached) — did not complete the assessment and were considered as non-response cases. In total, 2,789 Grade 1 children from 274 schools formed the study sample, covering all seven provinces.

Two assessment tools were used for this study: the ELDS assessment tool and the ECED center background survey. The ELDS assessment tool is a play-based tool developed by the Education Review Office (ERO) for Grade 1 children. It consists of 21 items (tasks) with 36 sub-tasks, covering physical, language, cognitive and socio-emotional and cultural domains. The tasks, sub-tasks and cut scores (see Annex 3 for details of the cut scores) were fine-tuned through a series of pilots and studies. Based on the results of the pilot assessment and through consultation with stakeholders, cut scores were developed and revised periodically. Using these cut scores, children were classified into three development categories: On Track (developmentally ready for Grade 1), Progressing (falling slightly behind but can progress with some support), and Struggling (falling far below the ELDS and requiring significant support).

Key Findings:

Children's Learning and Development Status

- 1. Overall, 49.1 % of the children assessed were found to be developmentally on track, 45.3% on progressing and 5.6% on struggling category. The physical domain (69%) had the highest on track percentage while socio-emotional (34%) scored the lowest.
- 2. Children who spoke a language other than Nepali performed lower (44.6% on track) compared to their Nepali-speaking peers (53.5% on track).
- 3. Though the survey did not take into account the socio-economic status of households, there is a large variation between children in institutional and community schools, with 67.1% children and 31.9% children developmentally on track respectively.
- 4. Province-wise, the highest portion of developmentally on track children are in Gandaki province (59.5%). Meanwhile, the highest portion of Struggling children are in Sudurpashchim (13.7%) province. Sudurpashchim province also has highest percentage of Progressing children (60.7%).
- 5. ECED centers in urban areas are significantly better across all domains, except the physical domain.

ECED Classroom Characteristics

 The government of Nepal has endorsed only one year of early childhood education for 4-year-old children. The majority (83.9%) of community ECED centers were found to offer one year of early childhood education. However, just 6.5% of institutional ECED centers were following this regulation, with the majority (89.8%) of institutional ECED centers offering three or four years of early childhood education.

- 64.67% community ECED centers maintained individual portfolios or records for individual children. This was higher for institutional ECED centers.
- Both institutional and community ECED centers were found to give homework on a
 daily basis. The homework was reading and numeracy focused, with handwriting and
 memorizing letters, words, and numbers. 64% of the ECED centers used workbooks and
 reference materials although neither the curriculum nor the ELDS encourage use of such
 materials for students.
- Community or parent support for ECED centers was found to be minimal and sporadic.

ECED Teachers Qualifications and Training

- Almost all ECED teachers in both community and institutional ECED centers have qualifications above Grade 10 graduation as demanded by the minimum standards. Children who attend ECED centers with teachers who have only a Grade 10 qualification scored significantly lower in all domains, compared with children whose teachers have higher educational qualifications.
- 76.8% of teachers received some form of in-service training in the previous year. However, only 33.4% of teachers in institutional ECED centers received in-service training, compared to 81.5% for community teachers. Furthermore, receiving in-service training has a statistically moderate and significant-positive association with language development. Similarly, a statistically marginal and significant-positive association is seen with the physical and composite domains.
- A significant majority of teachers in ECED centers (68.2%) did not receive any supervision and support from local government, private organizations, their headteacher, senior staff or colleagues.
- 47.9% of the ECED centers followed the curriculum in the daily teaching learning activities. At the same time, the ELDS were applied by 33% of teachers in the classroom. They used a mix of both the curriculum and the ELDS to make report cards and to plan classroom activities. Curriculum usage had a statistically positive association with cognitive and physical development.

Implications

 The majority (83.9%) of community schools provide one year of ECED classes as guided by existing laws and regulations. As per the Free and Compulsory Education Act, one year of early childhood education should be provided only when the child is four years old.
 Previous ECD regulations allowed the provision of childcare classes for children below the age of four. 89.8% of the institutional schools provide 3 to 4 years of ECED classes (such as playgroup, nursery, LKG or UKG), compared to 7.8% of the community schools. This demands regulated actions by local government to ensure the implementation of existing laws and regulations.

- One major takeaway from the above findings is the gap in enrollment across community
 and institutional ECED centers. It may be worthwhile to explore the factors that affect
 parents' decisions for choices on ECED centers through further research.
- The difference in the average learning and development status across provinces is significant. At the national level, province-wise differences in children's development and learning status should be considered when designing policies for effective targeting and prioritization. It is important to consider the fact that with minimal resources and intervention, many children who fall within the Progressing category can advance to be in the On Track category with the right support.
- Though the learning areas are not available and sufficient in the majority of classrooms, the availability and use of certain learning areas may positively support different development domains and may be considered as an area of further research. Particularly, the fact that reading areas have a negative association with the language development domain implies a critical need to assess the materials included and utilized there.
- When teachers only had a Grade 10 qualification, there was a negative significant association with the domains of assessment. Educational qualifications may be an important factor in ensuring the capacity of ECED teachers, but raising the required qualification from Grade 10 i.e., the current recommendation in the SSDP (MoE, 2016) to a higher level, such as Grade 12, could potentially lead to the improvement of ECED quality and enhance children's learning and development status. Since educational qualification influences workforce value, along with learnability in training and motivation in the workplace, there is a need for further research on this topic to carefully guide effective policy decisions.
- The lack of utilization of the curriculum (47.9%) and the ELDS (33.1%) combined with a high tendency to provide daily homework focused on academic skills has been seen in early schooling. The focus on academic skills is required only in later years of schooling, as recommended in the curriculum, as it can take away from the holistic development of the child. This demands wider public awareness and parenting education on age and development appropriate practices. Furthermore, teachers and school management committees should be aware and capacitated on curriculum and ELDS use.

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In conclusion, the study has provided insights into the school readiness status of children in terms of their early learning and development. There are implications for policy development and implementation, particularly in terms of targeted interventions for children in the Progressing category, addressing gaps in practice and resources in both community and institutional schools, and improving teacher qualifications and training. Finally, this study provides compelling evidence of an over-focus on academic skills in ECED programs, with a high dependence on homework, while the curriculum and the ELDS, which promote holistic child development, are weakly implemented.



Chapter 1 INTRODUCTION

Early Childhood Education and Development (ECED) interventions play a crucial role in fostering holistic child development and yielding long-term social benefits. The government of Nepal has made a significant investment in ECED, including the establishment and management of ECED centers. As per the Education Act's seventh amendment (2002), pre-primary education is recognized as one year of education targeted at four-year-olds. The eighth amendment (2016) renamed it Early Childhood Education (ECE), linking it with basic education (ECE to Grade 8). The Free and Compulsory Education Act (2018) renamed ECE as ECED, defining it as one year of education focused on the holistic development of four-year-old children before entering Grade 1.

There are two types of ECED centers in the country: community (government funded), and institutional (privately operated) centers. A total of 40,684 Early Childhood Education and Development Centers (ECEDCs) and Pre-Primary Classes (PPCs) were operational during the academic year 2023/24, out of which 33,061 (81.2%) ECEDCs/PPCs were government operated school and community-based centers. 7,623 (18.7%) ECEDCs/PPCs are privately operated, and 566 (1.3%) ECEDCs/PPCs are operated in traditional/religious schools. Of the government-run ECEDCs/PPCs, a total of 2,659 (6.5% of the total) are run by local government (CEHRD, 2023).

As the result of such efforts, a high level of access to ECED has been realized. The GER in ECED/ PPCs has increased from 94.9% in 2022-23 to 99.9% in 2023-24. The enrollment of 4-year-old children in ECED was consistent from 2022-23 to 2023-24 at 70.6 percent (CEHRD, 2023). With such a high level of access to ECED and increased awareness on the importance of quality education, the national priority has shifted away from access to focus on achieving quality ECED and improving the outcomes of ECED programs.

To establish a national standard on the expectations of what young children should learn and be able to do by the time they enroll in Grade 1, the Government of Nepal began developing the ELDS in 2008. Further validations were conducted from 2009 to 2011 (DOE, 2069 BS; UNICEF, 2017). Similarly, the National Minimum Standards for ECED Centers were formulated to regulate ECED centers and facilities in 2010 (DoE, 2010) and it was revised in 2018 (CEHRD, 2018).

Nevertheless, there is a need to clarify the outcome of ECED programs. The purpose of holistic development and school readiness among children, as set out in the ECED curriculum and Early Learning and Development Standards (ELDS), has not been previously determined. An initiative for assessing ECED and the early learning and development of children was initiated by the ERO in 2017. The focus here is the readiness of children in terms of their learning and development based on the School Readiness Conceptual Framework (UNICEF, 2012). It targeted Grade 1 children at the entry level, based on an assessment framework developed through a consultative process with experts and relevant stakeholders (See Annex 1). This assessment gives the opportunity to

assess children's learning and development status based on the ELDS and serves as proxy to assess the outcome of ECED programs at Grade 1. There has been continuous trial and error to improve the quality and rigor of the data collection tools and methods (Kitamura et. al, 2024). This report is based on the fifth round of the assessment conducted during June-July of 2023.

The objectives of this study are:

- a) To find children's developmental and learning status at Grade 1 (at the entry level) in reference to the Early Learning and Development Standards (ELDS).
- b) To identify the proportion and characteristics of children enrolled in Grade 1 who are at developmental risk.
- c) To identify the quality and characteristics of ECED programs as per the ECED minimum standards.
- d) To examine relationships between the characteristics of ECED programs and children's development and learning status to generate evidence for program improvement.

1.1. Methodology

1.1.1. The assessment tools

Two assessment tools were used for this study: the ELDS assessment tool and the ECED center background survey. The ELDS assessment tool is a play-based tool developed by the Education Review Office (ERO) for Grade 1 children. It consists of 21 items (tasks) with 36 sub-tasks, covering the following developmental domains: physical, language, cognitive, socio-emotional and cultural domains (elaborated in the assessment framework in Annex 1). Based on the results of the assessment, children were classified into three development categories: On Track (developmentally ready for Grade 1), Progressing (falling slightly behind but can progress with the right support), and Struggling (falling far below the ELDS and requiring significant support).

The ECED center background survey is based on the minimum standards for ECED in Nepal. It was used to collect data from ECED teachers on various aspects of their respective ECED centers. The tool includes questions covering broader topics, including administrative processes, student enrollment, teacher training, community engagement, language of instruction, curriculum and workbook usage, the arrangement of classroom space to support learning, and safety and hygiene of the infrastructure.

1.1.2. Sample size calculation and its characteristics

The sampling strategy for the study employed two stage cluster random sampling, with the primary sampling unit (PSU) being the school. The target cluster size (i.e., the number of children to be sampled in each school) was set at 15. The required sample size for the cluster (CSS) was

calculated based on the effective sample size (*ESS*) for simple random sampling accounting for a 9% margin of error at the 95% confidence level and design effect (*deff*) as follows:

The value of *deff* is computed based on the cluster size (*C*) and intra-cluster correlation (*ICC*) as follows:

The ICC was set to 0.25 referring to the NASA study on grade 3 students in 2015. Using this, the *deff* was accordingly calculated as being 4.50. The expected proportion of the indicator of our interest (% of developmentally on track children) was set at 50%. Based on these parameters set, the *ESS* and *CSS* were calculated for each explicit stratum (i.e., provinces).

Table 1
Sample Size Calculation

Provinces	Grade 1 students in the sampling frame	CSS for 9% ME	Required number of schools (PSU)	Final number of schools (PSU)
Koshi	29,833	531	35	40
Madhesh	71,773	533	35	40
Bagmati	38,438	532	35	40
Gandaki	10,833	528	35	40
Lumbini	51,717	532	35	40
Karnali	16,179	530	35	40
Sudurpashchim	22,852	531	35	40
Grand Total	241,625	3,717	245	280

As shown in Table 1, a total of 35 schools in each stratum (province) were required to meet the target accuracy of the estimations (i.e., 9% margin of error). Assuming 14% non-participation at both the school and student level, and considering the presence of small schools that have a smaller number than the required cluster size (i.e., 15), 5 extra schools were added to each stratum of the sample, leading to a total of 40 schools per province.

1.1.3. First stage sampling: Selection of schools

Once the size of the sample was determined, probability proportionate to size (PPS) sampling was used to randomly select the agreed number of schools for each province. To ensure that the probability of students being selected was the same regardless of school size, larger schools had a higher probability of selection than smaller schools, but students in larger schools had a smaller within-school probability of being selected than students in small schools. The probability of a

school being selected (P_i) was equal to the ratio of the school size (N_i) multiplied by the number of schools to be sampled (n_{sc} =40) and divided by the total number of students in the sampling frame (N) as follows:

$$P_i = \frac{N_i \times n_{sc}}{N}$$

To ensure that the sample represents the population as much as possible in terms of critical characteristics (those that are associated with the indicators of our interest), the list of schools was arranged by implicit stratum. From the available information in the Education Management Information System (EMIS), the following three variables were selected as the implicit strata: school types (community/institutional), Urban/Rural, and ecozone (Mountain, Hills, Terai). Furthermore, to keep the difference between the number of schools in the population and the sum of the school weights in the sample minimal, schools were sorted according to their size. From the sorted list of schools, 40 schools were systematically selected according to their PPS. We used the *sampling* package from 'R', specifically the *inclusion probabilities* (calculating PPS) function and the *UPsystematic* function (randomly selecting schools based on the PPS through the systematic sampling).

1.1.4. School Replacement

The originally selected 280 schools were located across 200 municipalities and 63 districts. There were logistical and cost-related challenges preventing the enumerators from traveling to 200 municipalities. Given the practical and logistical concerns, the Education Review Office (ERO) replaced sampled schools in municipalities which had only one sampled school (low-frequency municipalities) in a systematic manner. After the replacement of schools in low-frequency municipalities, the sampled schools were located across 99 municipalities and 44 districts. As traveling across 44 districts was still considered practically and logistically challenging, a second stage of the replacement was conducted by replacing sampled schools in districts which had four or less sampled schools (low-frequency districts) in a systematic manner matching the earlier approach.

After the second stage of the systematic replacement of schools in low-frequency districts, the sampled schools were located across 92 municipalities and 35 districts. A few exceptions were made, for example, the originally sampled schools in low-frequency municipalities and low-frequency districts were not replaced due to the absence of schools that met the criteria for replacing schools.

After the two stages of replacement, the sample had the same distribution of school characteristics as the original sample: school types (community/institutional), Urban/Rural, and ecozone (Mountain, Hills, Terai). The overall school size in the sampled schools was slightly different than the original sample and the sample after the replacement. This finding served as confirmation that the systematic replacement was successfully conducted with minimal bias.

1.1.5. Second stage sampling: Selection of students

Students were selected within the cluster by way of simple random sampling. Enumerators used a random number generating tool from the Kobo Toolbox and selected 15 eligible students. The enumerators referred to the student registration sheet provided by the school. The random number generated from the Kobo Toolbox was matched against the student's row number in the school registration and selected for assessment. If the school had fewer than 15 students, all the students were automatically selected for the sample. To ensure that this random selection was performed correctly, enumerators sent copies of the school registration (list of students) along with the selected 15 numbers generated randomly. The ERO conducted daily monitoring of the random selection process by comparing the reported information against the data of the ELDS assessment conducted with students in each school.

1.1.6. Sample representativeness

Table 2 provides a comparison between the eligible student population and the sampling frame for Grade 1 students across different provinces. It includes the number of schools and the total number of students in both the eligible population (excluding repeaters and small schools) and the sampling frame for each province.

Table 2
Sampling frame calculations

	Eligible P	opulation	Sampling Frame Sample				
Provinces	Schools (PSU)	Grade 1 students	Schools (PSU)	Grade 1 students	Selected School	Total Students in selected schools	Students Selected for Assessment
Koshi	4,942	43,394	1,324	29,833	40	1,352	568
Madhesh	3,728	78,478	2,318	71,773	40	2,254	586
Bagmati	4,910	510,449	1,662	38,438	40	1,485	579
Gandaki	2,588	17,783	525	10,833	40	1,202	564
Lumbini	4,522	61,797	1,959	51,717	40	1,716	585
Karnali	2,450	23,163	789	16,179	40	1,280	577
Sudurpashchim	3,211	31,512	1,149	22,852	40	1,044	570
Total	26,351	307,171	9,726	241,625	280	10,333	4,029

Table 3 shows the representation of the sample in terms of the proportion of Grade 1 students in institutional schools (i.e., the first implicit stratum). The final sample sizes for each province match the expected totals, and the unweighted and weighted percentages for institutional and community schools are closely aligned. For instance, in Koshi, the unweighted percentages are 46.4% institutional and 53.6% community, while the weighted percentages are 46.0% institutional

and 54.0% community. This consistency across all the provinces indicates that the weights have been appropriately applied, accurately reflecting the population distribution.

Table 3

Distribution of students in the sample

	Sampling	Final Sample	Percent Institutional	Percent Community	Percent Institutional	Percent Community
Province	Frame	Weighted	Unweighted	Unweighted	Weighted	Weighted
Koshi	1,352	68,814	46.38%	53.62%	46.03%	53.97%
Madhesh	2,254	271,301	9.09%	90.91%	9.22%	90.78%
Bagmati	1,485	96,479	76.16%	23.84%	75.76%	24.24%
Gandaki	1,202	22,352	70.38%	29.62%	69.22%	30.78%
Lumbini	1,716	149,203	34.62%	65.38%	34.32%	65.68%
Karnali	1,280	35,135	32.27%	67.73%	31.70%	68.30%
Sudurpashchim	1,044	40,905	26.05%	73.95%	25.88%	74.12%

Similarly, Table 4 shows the distribution of schools and Grade 1 students across urban and rural areas. The sampling representativeness for urban and rural distributions appears to be accurate. The weighted sample percentages closely match the eligible population percentages for both rural and urban areas across all provinces. For instance, in Koshi, the eligible population is 33.3% rural and 66.7% urban, while the weighted sample is 35.0% rural and 65.0% urban. A similar alignment is observed in other provinces, such as Madhesh, where the eligible population is 27.6% rural and 72.4% urban, and the weighted sample is 27.5% rural and 72.5% urban. This consistency indicates that the sampling method effectively represents the urban and rural distributions of the population, ensuring the sample is representative.

Table 4

Sample Representativeness for Urban and Rural distributions

	Eligible Population		Sampling Frame		
Provinces	Rural	Urban	Rural	Urban	
Koshi	33.3%	66.7%	35.0%	65.0%	
Madhesh	27.6%	72.4%	27.5%	72.5%	
Bagmati	12.8%	87.2%	15.0%	85.0%	
Gandaki	24.9%	75.1%	25.0%	75.0%	
Lumbini	46.0%	54.0%	45.0%	55.0%	
Karnali	47.4%	52.6%	47.5%	52.5%	
Sudurpashchim	37.4%	62.6%	37.5%	62.5%	
Total	32.0%	68.0%	32.5%	67.5%	

Table 5 shows the representativeness of the sample across geographical Ecozones. The sampling representativeness for ecozones in each province shows some variances but overall maintains a reasonable alignment with the eligible population distribution.

Table 5

Sample Representativeness for Ecozone

	Eligible Population			Sample		
Province	Hill	Mountain	Terai	Hill	Mountain	Terai
Koshi	10.4%	11.9%	77.6%	5%	10%	85%
Madhesh	0.0%	0.0%	100%	0%	0%	100%
Bagmati	84.8%	3.2%	12.0%	85%	2.5%	12.5%
Gandaki	77.9%	7.4%	14.7%	80%	5%	15%
Lumbini	15.3%	1.2%	83.5%	10%	0%	90%
Karnali	31.4%	68.6%	0.0%	32.5%	67.5%	0%
Sudurpashchim	17.1%	38.5%	44.5%	17.5%	35%	47.5%

1.1.7. Data collection process

The assessment tool developed for the study was a play-based questionnaire. The questionnaire was scored by trained enumerators according to the children's performance. Children were given a score of 2 if they performed the given task correctly, 1 if they performed it partially correctly, or 0 if they performed it incorrectly or did not respond.

To increase the validity of the data collection, attention was paid to the capacity of enumerators in terms of standardized assessment administration and scoring. When collecting the data, the enumerators coordinated with the teachers to create a suitable assessment environment. The teachers would help with language translation between the enumerators and the students only when needed, and ensure a sense of security, comfort and avoidance of distraction for the assessed children. Once such an environment was established, the enumerators invited the child to participate in some ice-breaking activities to develop rapport and trust, as per the assessment guidelines.

The ELDS assessment was conducted independently by enumerators without the presence of Grade 1 teachers and other staff. All the data were collected directly using the Kobo Toolbox application on a tablet device. The data collection and assessments were monitored by Education Review Office (ERO) officials online and physically in some of the centers to assure quality and facilitate the assessment process.

1.1.8. Final sample and non-response

Of the sampled 280 schools, the enumerators reached 274 schools and 3,978 students in total. Of these 3,978 children, 1,189 students (27.9% of the students reached) did not complete the assessment and were considered as non-response cases. The primary reason for non-response was absence on the day of assessment (87.6%), and the remainder (12.4%) did not participate in the assessment because of health concerns, no wish to participate, and other reasons. Therefore, a total of 2,789 students completed the assessment.

The enumerators could not reach the 6 non-participating schools because of coordination and access issues. Similarly, while selecting the students by conducting random sampling at school, some students were not present. Conducting the assessment solely with students who were regularly present might introduce the systematic exclusion of students who were absent. Hence, we did not conduct the assessment solely with the students who were present, leading to a decrease in the response rate. However, this was handled by reweighting the sample size after the assessment was completed. Reweighting ensured the accurate representation in the analysis of the unreachable schools and absent students. The total weight of each school was calculated, with a cap of 15 students as the cluster sample size. Subsequently, the within-school selection probability was calculated as the ratio of this capped total to the revised school total. This probability was then combined with the original sampling probability, producing a combined probability for each child, which was inverted to calculate the child's response weight. The response weight was further adjusted by multiplying it by the capped total, resulting in the final child response weight used in the analysis. For the ECED background data, school response weights were similarly calculated as the inverse of the original sampling probability, then merged with the dataset. These adjusted weights ensure that both ELDS and ECED background data analyses accurately reflect the revised sample design and updated school totals, promoting robust and national representation of the findings.

The non-response rate has improved by 10% from last year's survey. Table 6 provides an overview of non-response rate (i.e., the percentage of sampled students who did not complete the assessment) broken down by province, school type, Urban/Rural, and Ecozone. Karnali, Sudurpashchim, and Madhesh provinces have particularly high rates of non-response. Also, there is a higher number of non-response cases in institutional schools (as compared to community schools) and mountain areas (as compared with other Ecozones). It is also worth noting that rural areas have a higher rate of non-response than urban areas.

Non-responses reported in this report are in line with the findings from the 2019 Nepal Multiple Indicator Cluster Survey (NMICS). The 2019 NMICS survey reported that 81.8% of children in primary school (Grades 1-5) attended school regularly, and 18.2% did not (NMICS, 2019). The finding from this report and the NMICS report indicates that absenteeism gradually decreases as the student progresses to higher grades.

Table 6

Breakdown of non-response rates

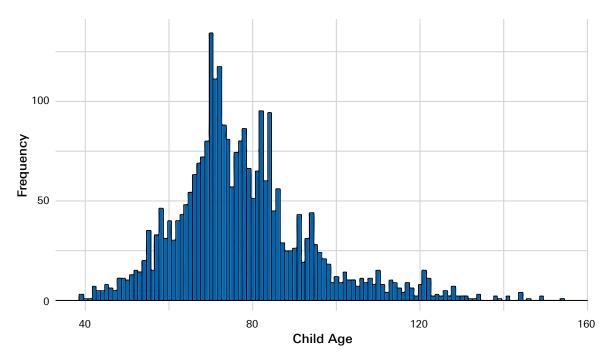
	Non-response rate 2022/23	Non-response rate 2023/24
Total	37.4%	27.9%
Province		
Koshi	34%	21.8%
Madhesh	45.8%	34.5%
Bagmati	23.1%	19.5%
Gandaki	23.7%	16.2%
Lumbini	40.1%	35.6%
Karnali	50.1%	38.8%
Sudurpashchim	45.4%	42.4%
School Type		
Institutional	20.4%	41.0%
Community	45.9%	39.3%
Urban/Rural		
Rural	42.6%	40.0%
Urban	34.3%	25.1%
Ecozone		
Mountain	53.5%	40.6%
Hills	35.2%	23.5%
Terai	37%	30.6%

1.1.9. Descriptive Characteristics

The assessment targeted children who have completed their ECED and enrolled in Grade 1. Ideally, the age to complete the ECED and enroll in Grade 1 is expected to be 60 months or above. However, from practice and observation it has been seen that older children are enrolled in Grade 1. As per the data, the minimum age observed is 39 months and maximum age is 154 months, with 77 months being the mean age of the assessed children and 16.4 the standard deviation (SD).

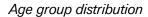
Figure 1

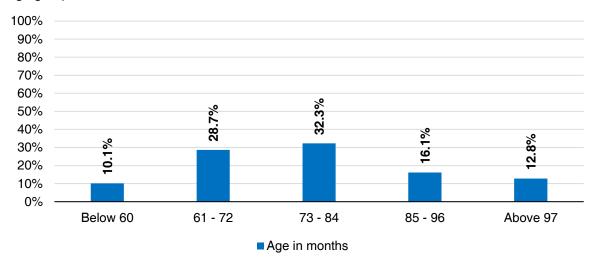
Histogram of Child's Age



The distribution of the age groups of the assessed children largely fall within the target age categories of the respondents, with the majority in the 61-72 months and 73-84 months age groups.

Figure 2





The percentage of boys was 52.4%, and girls was 47.6% in the sample, consistent with the enrollment rate reported in the Flash Report for 2022/23 (CEHRD, 2023). Meanwhile, the rate of Grade 1 children with ECED experience was higher in the sample, with 91.6% of the assessed children attending an ECED program either in the same or different centers—while the same was reported at 76.9% in the 2023 Flash Report (CEHRD, 2023).

1.2. Standard setting

The purpose of the standard setting procedures was to generate cut scores for each category of the revised Early Learning Development Standards (ELDS) assessment tool. The standard setting exercise was led by the Education Review Office (ERO) and the Ministry of Education, Science and Technology (MoEST) Nepal, with technical support from UNICEF Nepal and other stakeholders.

The ELDS assessment tool was developed based on standards for children aged 48-60 months, corresponding to the target age of early childhood education in Nepal. The assessment framework and tool are organized around six domains: Physical, Social, Emotional, Cognitive, Language and Cultural (Kitamura & Acharya, 2022).

After revision in 2020, the current assessment tool has 21 subtasks with 36 items. This is the same assessment which was used in the survey of June-July 2023. Later, in 14-15th September 2023, a standard setting exercise was conducted to generate cut scores on the ELDS assessment scale to classify children into three development categories: On Track, Progressing and Struggling. Although there is significant age variation in the sample, the cut scores were generated for the target age group: 61-72 months (5 years) only. After thorough discussion among the panelists, this decision was made to primarily align with the national curricular goals. The purpose of the cut scores is to ensure that the country teams can monitor to what extent children in Nepal are developmentally on track, corresponding to the global call based on SDG target 4.2 (Kitamura and Acharya, 2022).

This section includes a summary of the key activities, methods and results from the standard setting exercise.

1.2.1. Standard Setting Process using the Yes/No Angoff Method

The Angoff method is a standard setting technique where subject matter experts estimate the probability that a minimally competent candidate would answer each test item correctly, and the average of these estimates determines the pass score. The Angoff method is a common, test-centered, standard setting method used in large-scale educational assessments (Sireci & B., 1992). A common application of the method involves rating each item in the assessment based on the panelists' judgment of what constitutes a borderline student where borderline represents the abilities and skills of a student who is exactly at the cut-off point between two performance levels. The panelists give each item a rating that indicates the proportion of borderline students that they think would be able to answer the item correctly (e.g., 0.8 or 0.75). The panelists then provide feedback based on the actual item performance of the total group of examinees on the items, after which another round of rating is conducted. The average of all the final panelist ratings is then taken to be the cut score (Plake & Impara, 1997).

We used a modified version of the Angoff method as suggested by (Plake & Impara, 1997) Instead of having panelists estimate a percentage number for each item, they were only asked to indicate whether the borderline student would, in their estimation, be able to answer the item correctly. Based on their judgment and experience, they either indicated yes or no against each item. The panelists repeated this process for two performance level cut-offs: "minimally progressing" and "minimally on track".

The primary reasons for using this simplified version of the Angoff method was the relatively simple rating task, which would allow panelists to provide more reliable data.

1.2.2. Composition and formation of Panel

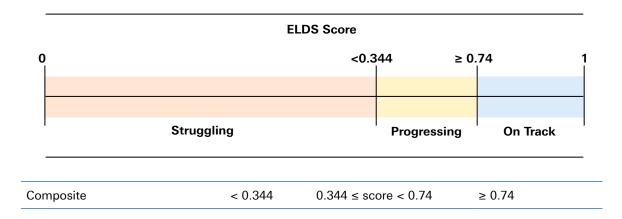
17 individuals were invited to be members of the cut score development panel. These individuals are renowned experts and practitioners in various fields of ECED. Following the suggestion by Kane (1994), a diverse group of panelists was selected to ensure the participation of stakeholders representing various aspects and levels of ECED in Nepal. The panel therefore included teachers from both community and institutional schools, professors of early childhood development, government officers and ECED experts from UNICEF (see Annex 4).

1.2.3. Performance level descriptors

The facilitator of the workshop introduced the Yes/No Angoff method and the concept of the "minimally progressing" and "minimally on track" students, who represent the threshold between children belonging to two separate performance levels. A "minimally progressing" student represents the borderline dividing the Struggling and Progressing categories; similarly, the "minimally on track" student represents the borderline between the Progressing and On Track categories (Cizek et al., 2004).

Figure 3

Illustration of the two borderline performance levels in this workshop



The panelists were given time to read through and understand the existing performance level descriptors and their corresponding borderline descriptors. The domain-level descriptors were developed for each domain in previous years, while the borderline descriptors (see Annex 3) were developed for the study's target age group, i.e. 61-72 months.

In addition, the panelists watched videos of children in ECED centers across Nepal performing tasks similar to those tested on the ELDS and engaged in discussion about categorizing the children in the videos using the performance level descriptors. The videos were taken during the UNICEF team's field visits to ECED centers in 2022 and captured children doing tasks based on the ELDS as adapted for classroom use. Tasks included differentiating between two bottles of different sizes and identifying the correct emotion displayed in a picture of a crying child.

1.2.4. Round 1 Rating

Before rating the items, the panel had a discussion on the items in the ELDS assessment, especially focusing on items with multiple components or complex scoring systems. The panel also briefly observed videos of children in ECED centers in Nepal performing non-ELDS tasks in various domains (physical, language, etc.) to set a general reference of the level of the children's development. Additionally, the panel participated in a practice round of ratings with a dummy list of items to simulate the actual rating process. During this practice round, the panel was also trained to report the scores in Google Forms for each round. The panel then commenced Round 1 rating. For each item in the assessment, they indicated either Yes or No for two performance levels, based on their estimation of whether each borderline student would give the correct answer. For example, when thinking about the first item (asking the child their age), panelists first considered whether the "minimally progressing" child of age 5 would answer correctly, and marked yes or no accordingly. Then, they considered whether a "minimally on track" student of the same age would answer correctly and completed a yes/no ranking accordingly. Panelists repeated this process for all 36 items in the assessment. This marked the end of the day's activities for the panelists.

As per the procedure followed by Plake and Impara (1997), cut scores were generated by averaging the panelists' ratings across all items. First, "yes" responses were counted as 1 and "no" responses as 0; then, the percentage of total "yes" responses for each item were averaged across domain-specific items to calculate the final cut scores for each domain. The final composite cut scores were calculated by averaging the composite cut-off scores of all the individual items.

1.2.5. Round 2 and 3 Rating

Round 2 Rating

The second day of the workshop began with a recap of the previous day's work and a discussion on the agenda for Day 2. Following this, the panelists were provided information about the group's recommended cut scores from the first round of ratings. They were also shown real performance data of 5-year-old students on each item to allow for "reality checks" about the difficulty of the

items. The panelists engaged in a discussion about the difficulty level of certain items and shared their reasoning for their ratings with the larger group. Panelists were once again guided by the Angoff procedure, following which they completed Round 2 ratings.

Round 3 Rating

Once Round 2 was completed, the panelists took a short break while the facilitating team compiled the ratings and produced cut scores based on the panelists' Round 2 ratings. These new cut-scores were presented to the panelists, who engaged in a discussion on how and why their ratings had changed from Round 1 to Round 2. In general, the new cut scores were seen as much "stricter" than those of the previous round. Panelists discussed certain items that they felt had been difficult to rate, particularly for the minimally progressing student. After this discussion, the panelists completed the final round of ratings.

After Round 3, the panelists were also shown the impact data resulting from their ratings: graphs showcasing the proportion of developmentally on track students across age groups as well as for each domain were presented. After a brief reflection and closing remarks, the workshop concluded. To evaluate the validity and reliability of the recommended cut scores, researchers conventionally consider three types of validity evidence: internal, external and procedural (Kane, 1994; 2001). Internal validity refers to the internal consistency of panelists' ratings, evaluated by calculating variance components at the judgement and/or item level to estimate the standard error of the cut score ((Kane, 1994). Procedural validity refers to the 'appropriateness of the procedures used and the quality of implementation of these procedures' (p. 437), evidence for which may come from documentation, panelist surveys and discussions. Finally, external validity checks rely on comparisons with other sources of evidence, such as the consistency of cut scores across different standard setting methods (Karantonis & Sireci, 2006).

In this section, we focus primarily on internal and procedural validity evidence. Because of the lack of data and evidence for external validity (e.g., no other method was used in this study that could function as a comparison with the Angoff method), the analysis in this category is limited to brief comparisons with similar standard setting exercises conducted in 2022 and 2023 with previous versions of the ELDS assessment tool.

1.2.6. Internal Validity

Inter-judge consistency: Standard Errors and Confidence Intervals

To explore the internal consistency of panelists' ratings across three rounds, the standard error and resulting confidence intervals of the generated cut scores was computed. Since Round 1 is the only round in which each panelist makes his or her ratings independent of the other panelists, without influence from group discussion or consequence data, it has been suggested that within-study standard errors (SE) computed from Round 1 judgments may be the most accurate estimate

of cut score SEs (Reckase, 2006). In Table 7, we provide SEs computed from the first round of item rating as the most accurate estimate of cut score SEs as well as those computed from the second and third round as evidence of the variability of the cut scores.

Table 7

Standard Errors for Cut scores (SD proportion)

	SE First round (r			
Age Group	Physical	Cognitive	Language	SE/Cult
Minimally progressing	0.07	0.05	0.06	0.05
Minimally on track	0.07	0.05	0.04	0.04
	SE Second round (n=15)			
Age Group	Physical	Cognitive	Language	SE/Cult
Minimally progressing	0.05	0.04	0.04	0.04
Minimally on track	0.05	0.03	0.04	0.05
	SE Third round (n=17)		
Age Group	Physical	Cognitive	Language	SE/Cult
Minimally progressing	0.06	0.05	0.05	0.06
Minimally on track	0.06	0.04	0.04	0.04

To calculate the Standard Error, $SE = \sqrt{\frac{p(1-p)}{n}}$ where p is the sample proportion (i.e., the proportion of "Yes" responses and n is the sample size (17).

1.2.7. Cut scores

The SEs for cut scores generated across the three rounds are generally low. The majority of SEs decrease from Round 1 to Round 2, which is expected and typical for standard setting exercises of this kind (Kane, 1994). However, the SEs show a slight increase in Round 3, indicating the panelists' reconsideration of their previous round's results and the resulting divergence in their ratings. Nonetheless, the relative size of the SEs remains small, especially in comparison to the cut score SEs generated in a previous standard setting exercise undertaken using the ELDS assessment (ERO, 2021; 2023).

Table 8 further shows the confidence intervals for each set of cut scores generated from Round 3.

Table 8

Final round cut scores and their confidence intervals

	Final recommended cut sco	Final recommended cut scores [Confidence interval]				
Age group	Minimally progressing	Minimally on track				
Physical	28.4 [13.89, 42.97]	73.5 [59.51, 87.55]				
Cognitive	29.4 [19.26, 39.56]	65.7 [56.68, 74.88]				
Language	40.5 [29.07, 52.10]	80.7 [79.31, 94.80]				
SE/Cultural	39.2 [28.47, 49.96]	69.9 [61.22, 78.65]				

The confidence intervals (CI) are calculated as follows: $CI = CS \pm z * SE$, where CS is computed cut scores, z is a z-score at the 95% of confidence level (i.e., 1.96), and SE is standard errors from the first round of item rating.

The confidence intervals are relatively large, particularly in the language domain, indicating that a different group of panelists conducting the same rating activity could potentially produce a slightly wider range of results. However, there is no overlap between the intervals of the two borderline levels within the domains, meaning that the cut scores can effectively differentiate children across different developmental categories.

1.2.8. Procedural Validity

As suggested by Kane (1994), our procedural validity analysis focuses on panelist feedback about the procedure and the implementation of the standard setting exercise, as well as panelist confidence in the final results. The data analyzed in this section come from a self-reported survey circulated at the end of the workshop, which was filled in by 16 panelists with 1 non-response. We used five key indicators (see below) to analyze our standard setting procedure, which is followed by an analysis of panelist confidence in the results.

Definition of goals: Many of the panelists invited to the workshop had been part of the standard setting exercise last year. Given this previous exposure and the session dedicated to explaining standard setting on Day 1, all panelists, but one, who took the survey indicated that they were clear about the overall purpose and importance of the standard setting exercise (81.3% strongly agree, 12.5% agree).

Selection of panelists: As recommended by Kane (1994), we aimed to ensure a diverse group of panelists in terms of geographical area, organizational background and educational responsibilities. While our panelists represented diverse professional expertise (academia, NGOs, policy, teaching and enumeration), they were all from the Kathmandu Valley, indicating that there was little representation from areas outside the capital city, such as rural or remote/mountain areas. This lack of geographical diversity was also pointed out by a few panelists in the feedback form, who recommended that there should be more variety in the perspectives of the panel.

Training: As described above, the panelists spent a significant amount of time during the workshop increasing their understanding the Angoff procedure, with adequate time for questions and answers, and were also able to conduct practice ratings during a demo round. Furthermore, their understanding of assessment items, performance levels, and the corresponding borderlines was supported by watching "reality check" videos of children performing various tasks in ECED classrooms. All panelists agreed (12.5%) or strongly agreed (87.5%) that they understood the Yes/No Angoff procedure. Similarly, all panelists agreed (62.5%) or strongly agreed (37.5%) that they were easily able to apply the concept of borderline student in their rating work.

Performance standards: As part of the workshop, panelists were asked to use existing performance standards (designed for age 5 from previous standard setting) as a main source for their item rating so that cut scores would represent the intended performance standards. Although the panelists were not directly involved in creating them, their discussions in between the rounds indicated that they were using the performance standards as intended.

Data collection: To ensure consistency for the data generated, time between rounds was planned for panelists to discuss their ratings with each other and review their ratings based on real performance data (Hambleton & Powell, 1983), (Zieky & Perie). The panelists indicated that they understood the task and the rating process well, and we found no obvious errors in any of the participants' responses over the three rounds. Finally, panelist confidence data suggests that all the panelists were confident about their own ratings as well as the final cut score (75% strongly agreed that they felt confident about their ratings, and 56.3% strongly agreed that they felt the final ratings were accurate). Overall, the procedural and internal validity analyses provide enough evidence for the reliability of our generated cut scores.

1.2.9. Final Cut Score Determination

Once the workshop was concluded, the results from the three rounds of rating, as well as the validity and reliability evidence, were reviewed by an internal technical team from UNICEF and the ERO. The ratings from Round 3 were used as the final set of cut scores for the sample.

Table 9

Final cut score for the domains of study

Development Domain	Struggling	Progressing	On Track
Composite	< 0.344	0.344 ≤ score < 0.74	≥ 0.74
Physical	< 0.284	0.284 ≤ score < 0.735	≥ 0.735
Language	< 0.405	0.405 ≤ score < 0.807	≥ 0.807
Cognitive	< 0.294	0.294 ≤ score < 0.657	≥ 0.657
Social-Emotional	< 0.392	0.392 ≤ score < 0.699	≥ 0.699

1.2.10. Standard Setting Results

Results from the final round of the standard setting workshop are presented in Table 10

Table 10

Final cut scores (Round 3)

Development domain	Minimally on track	Minimally progressing
Cognitive	65.7	29.4
Language	80.7	40.5
Physical	73.5	28.4
SE/Cultural	69.9	39.2
Composite	74.0	34.4

Overall, the items in the cognitive and physical domains have the lowest threshold for the "minimally progressing" student, indicating that these items were judged as slightly more difficult than items from other domains. Similarly, it appears that items in the language domain were judged as relatively easy, with a high threshold for both the "minimally progressing" and "minimally on track" groups.

Table 11

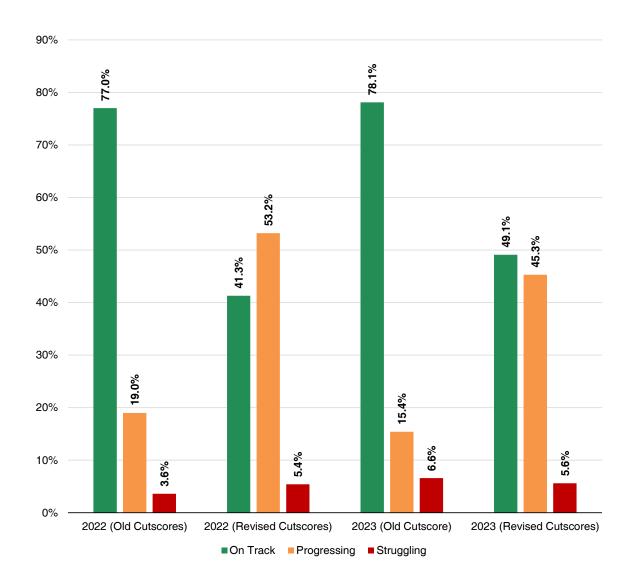
Old and Revised Cut Scores

	Struggling	Progressing	On Track
Old cut scores	Score > 37.20	37.20 ≤ Score ≤ 59.39	59.39 ≤ Score
New cut scores	Score > 34.4	34.3 ≤ score ≤ 74	74 ≤ Score

This resulted in a change to the cut scores between the newer assessment and the earlier assessment from 2022.

	On Track	Progressing	Struggling
2022 Data (Old cut scores)	77.0%	19.0%	3.6%
2023 Data (Old cut score)	78.1%	15.4%	6.6%
2022 Data (Revised cut scores)	41.3%	53.2%	5.4%
2023 Data (Revised cut scores)	49.1%	45.3%	5.6%

Figure 4
Status of children for both cut scores.



1.3. Limitations of the Study

To ensure the results of this study are interpreted in an informed and transparent way, it is important to acknowledge the limitations. These limitations primarily concern issues with the assessment tool and data collection.

The ELDS assessment tool has undergone multiple revisions in the past few years, most notably based on the analysis by (Kitamura & Acharya, 2022) and (Kitamura et. al, 2024). These improvements have resulted in an assessment tool that has stronger content relevancy and representativeness, as well as a domain structure that largely explains the variance in item responses. However, the primary issue in the validity and reliability of its usage in this study stems from the standard setting exercise, where cut scores were determined to classify children

as developmentally on track. Theoretically, the ELDS is designed for 4-year-olds (48–60 months), while the assessed children were in Grade 1 (60 months or older), though some underage children are also enrolled. Ideally, all children should meet these developmental standards, but this was not always the case. Establishing cut scores to classify children was challenging and may not be perfect. Ultimately, a single set of standards was agreed upon while developing the cut scores.

In terms of data, though there has been significant improvement in the response rates compared to last year, there is still a significant non-response rate in the study relating to absenteeism due to various reasons. Given the significant rates of absence during the period of assessment, it may be worthwhile to consider either increasing the sample size or finding another way to account for non-participation. Despite the addition of non-response weights to balance the sample, the study may still miss key data from children in more remote, rural areas, where developmental milestones and quality of ECED services may look different than in more accessible areas. Thus, the results of the study should be interpreted with care, particularly when considering policy implications that may apply at a federal level.

Nevertheless, the districts, schools and students in the study were randomly sampled, while largely accounting for the critical regional differences between ECED programs (i.e., school type, Urban/Rural, and ecozone). Therefore, the results of the study can, with caution, be generalized to the larger population, i.e., children enrolled in Grade 1 who were eligible to attend ECED programs in Nepal in the school year of 2022/2023. Furthermore, the inclusion of both institutional and community ECED programs in the sample allows the study to portray a comprehensive picture of the quality of ECED services currently available to children in Nepal. Despite the limitations discussed above, the results of the study sheds valuable light on the overall learning and development levels of children across Nepal.

Finally, the background information of ECED Centers was gathered from those schools where the Grade 1 assessment was conducted. This enabled us to compare the data of the individual assessment of children against the teachers' qualifications and infrastructures available in the same ECED center in the school. 82.2% of the assessed children attended the same ECED center in the school and another 9.4% attended ECED centers in other schools. 8.4% did not participate on any ECED programs. Hence, this assessment does not cover independent ECED programs such as pre-schools. The teachers' qualifications and other infrastructure in the ECED centers might be different for a small fraction of the sample.

The analysis of the data does not segregate the findings based on whether the assessed student attended an ECED center or not. This was decided by taking into consideration the purpose of this study, which is to determine the readiness of the enrolled student at Grade 1, despite their ECED experience, rather than the effectiveness of the ECED program.

29

Despite these limitations, the study uniquely provides rich information and insight into the status of school readiness in terms of Grade 1 children's early learning and development. We hope that this report raises awareness among stakeholders on the current quality and obstacles facing ECED in Nepal. We encourage and welcome researchers to conduct further research so that we can accumulate more evidence and knowledge to ultimately ensure that all children in Nepal are developmentally on track.

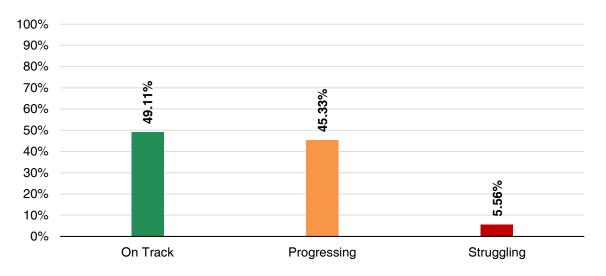


Chapter 2

CHILDREN'S LEARNING AND DEVELOPMENT STATUS

All the analysis in this report refers to the cut score developed from the second round of the cut score development exercise mentioned in earlier standard setting section. Using these cut scores, children were classified into three development categories: On Track (developmentally ready for grade one), Progressing (falling slightly behind but can progress with some support), and Struggling (falling far below the ELDS and requiring significant support).

Figure 5
Composite ELDS score 2023/24



The composite scores (the average score for all domains), show that 49.1% of the children enrolled in Grade 1 are in the On Track category, and hence nearly half of the overall group meets the developmental expectations across all areas. A substantial proportion (45.3%) are in the Progressing category: the children can meet the standards with limited support. The Struggling group is the smallest at 5.56%, showing that a small group of children face widespread developmental challenges.

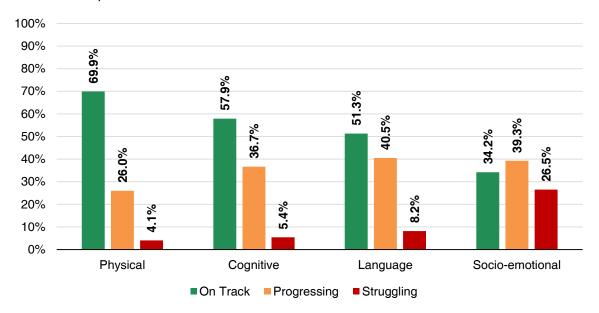
2.1. Domain wise performance

Across the domains, children performed best in the physical domain, with a significant majority (69.9%) being in the On Track category, indicating they meet or exceed the expected performance level in their physical development. Children also performed well in the cognitive domain, with 57.9% meeting the criteria of being in the On Track category. The children performed relatively

well in the language domain (51.3% On Track) as well, whereas only 34.2% of children are in the On Track category for the socio-emotional domain. Meanwhile, the socio-emotional domain has the highest proportion (26.5%) of children in the Struggling category.

Figure 6

ELDS Scores by Domain

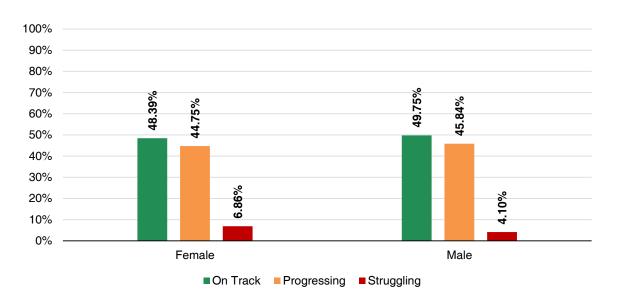


2.2. Gender wise performance

The overall comparison of gender provides insights into the distribution of the children's composite scores by gender. The gender wise composite score is almost similar, without any statistical difference, with 49.8% of boys being in the On Track category compared with 48.4% of girls.

Figure 7

Comparison of ELDS Score by Gender



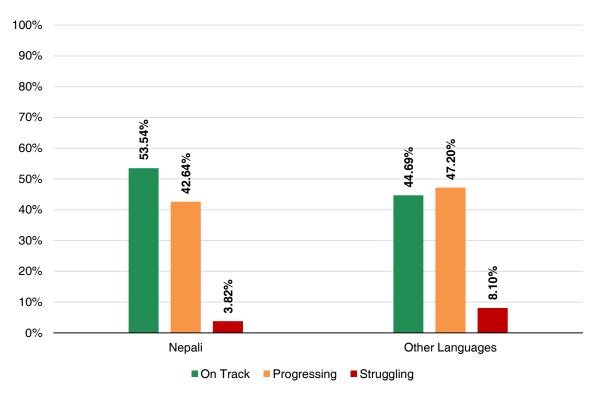
The relatively balanced distribution by gender for the On Track and Progressing categories indicates that, generally, both boys and girls are achieving similar levels of performance. There is, however, a higher percentage of girls struggling compared to boys, indicating that more girls might need additional support to reach the On Track or Progressing categories.

2.3. Performance based on mother tongue

The data regarding mother tongue and performance indicate that children who speak Nepali as their mother tongue, are more likely to be in the On Track category (53.54% of the children) compared with the children whose mother tongue is other than Nepali (44.69% of the children), indicating a variance of more than 10 percentage points between these groups of children (see Figure 8).

Figure 8

ELDS Scores by Mother Tongue



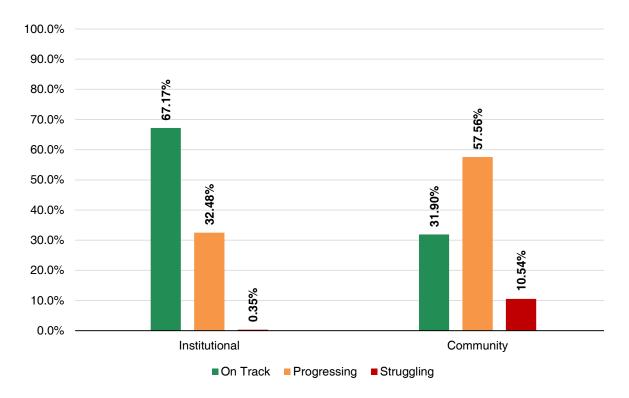
Similarly, children whose mother tongue is other than Nepali, are more likely to be in the Struggling category (8.1% struggling), compared with the children who speak Nepali as their mother tongue (3.8% struggling).

2.4. Performance based on school type

There is a large variation in children's performance when comparing the type of school they attend (i.e., institutional or community). While 67.2% of children in institutional schools are in the On Track category, only 31.9% children in community schools are in this category. Likewise, only very few (0.3%) children in institutional schools fall into the Struggling category, while in community schools, one out of every ten children (10.5%) fall into this category. However, this finding requires further analysis, and its interpretation should be approached with caution. Since this is a school-based survey, socio-economic status was not considered, and community and institutional schools follow different approaches. Further number of years in ECED varies significantly across the Institutional and Community ECED Centers.

Figure 9

Comparison of ELDS Score between community and institutional schools

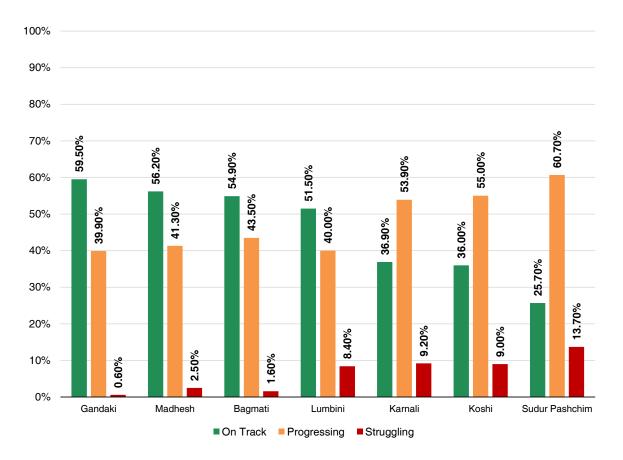


2.5. Performance based on provinces

When analyzing the performance levels based on provinces, it becomes evident that some variance exists. When 50% to 60% of children in Gandaki, Lumbini, Bagmati, and Madhesh are in the On Track category, only 25% to 37% of their peers in Sudurpashchim, Karnali, and Koshi reach this level of development.

Figure 10

Comparison of ELDS scores between different provinces



While the number of children in the Struggling category remains minor in Gandaki (0.6%), Bagmati (1.6%) and Madhesh (2.5%), in Sudurpashchim, Karnali, and Koshi, the number of children remaining in this category is much higher.

The findings suggest that the overall performance varies across the different provinces, and that children in some geographical locations need more support with their development to reach the expected performance levels.



Chapter 3

ECED CENTER CHARACTERISTICS

ECED centers attached to schools were surveyed in this study to confirm their characteristics. However, the findings of this survey cannot be generalized given that all children may not have been to the same ECED centers.

3.1. Class Structure

While the government of Nepal has endorsed only one year of early childhood education for 4-year-olds, a past ECED regulation (2004) allows communities to establish childcare centers (Sishu Syahar Kendra) for 3-year-olds (36-47 months). Furthermore, there is also a growing number of institutional ECED centers, unaffiliated with the government, offering kindergarten and/or nursery services for young children across age groups starting as early as 30 months. Table 12 provides an overview of the various types of classes offered by ECED programs.

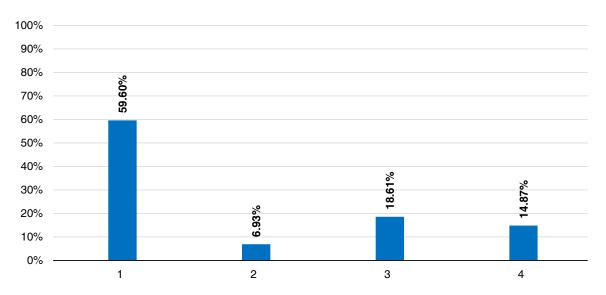
Table 12

ECED Classes, their target age groups and purpose

Type of Class	Target Age Group	Description
Playgroup	18-35 months	Institutional/NGO childcare service for young children to play and socialize
Nursery	36-47 months	Category of class used by Institutional preschools for the targeted age group.
LKG (Lower Kindergarten)	48-59 months	Category of class used by Institutional preschools for the targeted age group.
UKG (Upper Kindergarten)	60-72 months	Category of class used by Institutional preschools for the targeted age group.
Sishu Syahar Kendra	36-47 months	Independently operated by Communities for childcare center optional as per ECD regulation (2004)
Bal Bikas Kendra	48-59 months	Government-funded early childhood education which was previously community-based. A majority of these were merged with schools after 2016 amendment to the education act; However, there are still community-based ECED centers known by this name, while school-based centers which were merged, were often called by the same name.

Figure 11

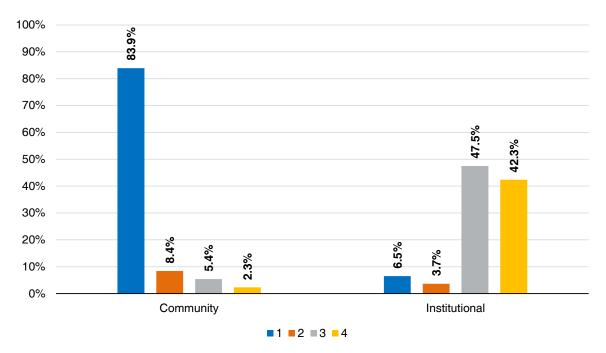
Number of classes offered in ECED Centers



The majority of the ECED centers (59.6%) surveyed had just one operating ECED class on average. 18.6% of the centers were found to be operating three ECED classes and 14.9% were found to be operating four ECED classes. Only a few centers (6.9%) operated with two classes as ECED.

Figure 12

Number Of ECED Classes Offered By Institutional And Community ECED Centers



In community schools, 83.9% of ECED centers have one operating class, compared to just 6.5% ECED centers for institutional schools. The analysis shows that the institutional ECED centers operate more classes than the community ECED centers.

3.2. Children, Teacher and Caretaker / Assistant Numbers

ECED centers across the country reported employing both teachers and caretakers in ECED. Although there is no official provision for caretakers in community schools/ECED centers, 32.8% of community ECED centers reported having one caretaker. However, many ECED centers have allocated such caretakers / assistants through alternative sources, which is not funded by government. Among institutional ECED centers, a large majority (96.2%) reported having one or more caretakers.

Institutional ECED centers have a higher number of teachers (on average, there are 6.4 teachers in institutional centers and 1.8 teachers in community centers). This could be because of multiple sections and multiple-years of ECED classes that are operated by Institutional ECED Centers. Regarding student enrollment, institutional center enrollment tends to be higher and more varied than at community ECED centers. This means there is a mix of both low and high enrollment across institutional centers, whereas community ECED centers generally have around 32 children per school. In these centers, half of the schools have 32 or fewer children, while the other half have 32 or more. The median for the children in Institutional schools is 103, meaning that half of the schools have fewer than 103 children and half of the schools have more than 103 students.

Table 13

Numbers of Children, Teachers, and Caretakers Across ECED Centers

Institutional ECED Centers			Community ECED Centers			
	Teachers	Assistants	Children	Teachers	Assistants	Children
Mean	6.4	4.2	122.9	1.8	0.6	42.2
Median	5	4	103	1	0	32
SD	3.7	3.8	69.5	1.1	1.3	30.1
Min	1	0	15	0	0	3
Max	24	26	380	8	10	237

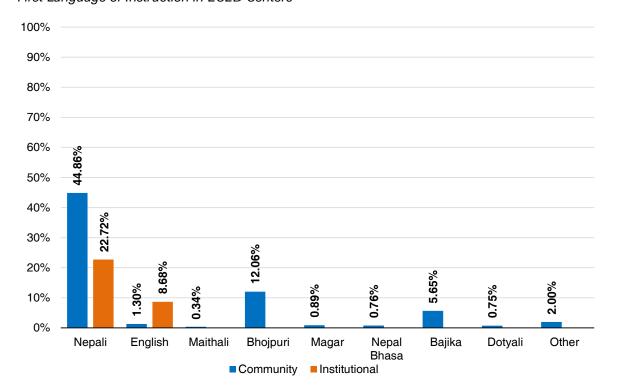
Teachers at the ECED centers reported the age groups (in years) of children enrolled in each individual class to enable the analysis of the distribution of enrollment age across different ECED classes. The enrollment is largely age-appropriate, with playgroup classes consisting of the youngest children (around 2-3 years old) and UKGs having the oldest age group (5-6 years). However, it is important to keep in mind that these estimates do not calculate age in months, meaning that a significant variation in developmental ability may still exist among children within each of these classes.

Playgroup has the youngest mean age at approximately 2.8 years (33 months), followed by Nursery at 3.6 years (43 months), Sishu kakshya (infant class) at 3.5 years (42 months), Pre-primary class at 3.7 years (44 months), and Bal bikas kendra (ECED center) at 3.7 years (44 months). The mean age increases for LKG at 4.5 years (54 months) and UKG at 5.4 years (64 months), reflecting the progression of ages as children advance through these early educational stages.

3.3. Language of Instruction

The Act relating to Compulsory and Free Education, 2075 BS (2018) indicates that the language of instruction can be Nepali, English or both, as well as the mother tongue of the community concerned. Hence ECED centers use Nepali, English or mother tongue languages in instruction. The language of instruction is an important consideration in early childhood education, particularly in Nepal, as there are 124 recognized national languages with regional variations (National Statistics Office, 2021).

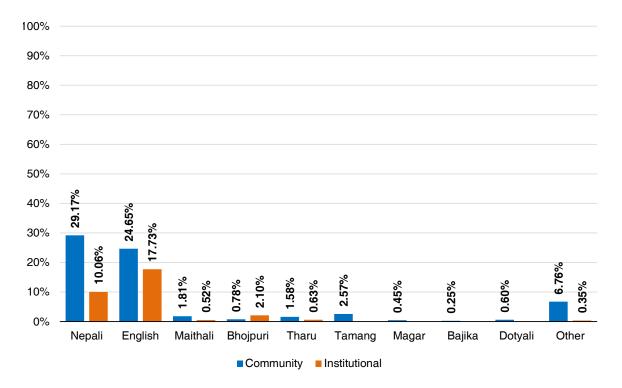
Figure 13
First Language of Instruction in ECED Centers



Overall, Nepali is the first language of instruction with 67.6% of ECED centers using Nepali (with community ECED centers making up 44.9% and 22.7% for institutional centers). On the other hand, community centers using English as the first language of instruction make up 1.3% of all ECED centers, compared to 8.7% for the institutional centers. Bhojpuri (12.06%) and Bajika (5.65%) are other highly used languages of instruction in community schools. Institutional schools did not report the use of any language other than Nepali and English as language of instruction.

Similarly, English is a more common second language of instruction among institutional centers than community centers. In general, community centers have a more diverse set of languages in use, especially as a second language, while institutional centers typically use Nepali and English. Additionally, most ECED centers reported using both a first and second language of instruction, with only a small proportion not using a secondary language of instruction at all.

Figure 14
Second Language of Instruction in ECED centers

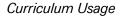


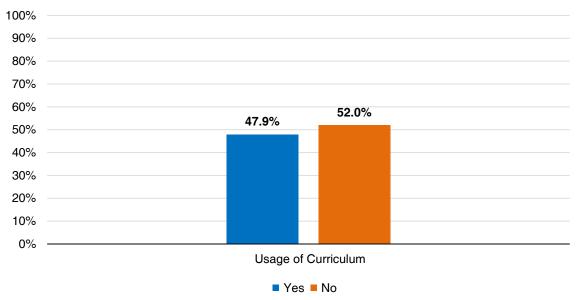
Furthermore, of the total number of ECED centers, 29.2% were community ECED centers with Nepali as the second language of instruction compared to 10.1% for institutional centers; 24.7% were community ECED centers with English as the second language of instruction compared to 17.7% for institutional centers. Community centers using other languages as the second language of instruction make up 6.8% of all centers.

3.4. Curriculum Usage and ELDS in the classroom

Of the teachers surveyed, 47.9% reported following a curriculum in their classrooms for daily teaching learning activities, whereas 52% reported following no curriculum. This is in line with the 50.8% reported as following a curriculum in the Flash Report (CEHRD, 2023).

Figure 15

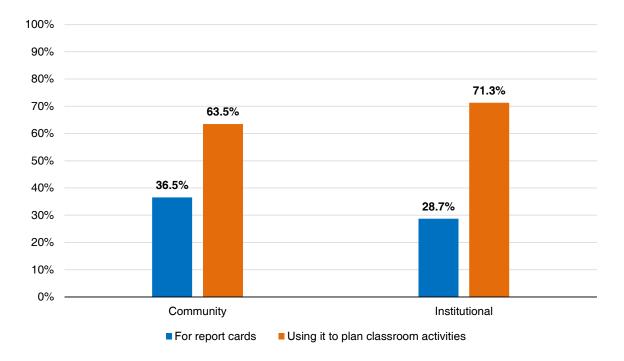




Of all the ECED centers that had a curriculum, the majority (about 87.8%) followed the government curriculum, Teachers in community centers were more likely to use the government curriculum (51.9%) compared with the teachers in institutional centers (35.7%) in daily teaching and learning activities.

Figure 16

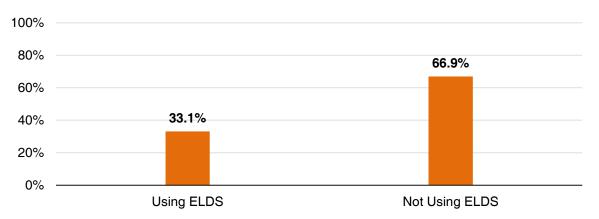
Purpose of using curriculum in ECED



Of those ECED Centers which follow a curriculum, the majority used the curriculum to plan classroom activities and generate report cards.

Figure 17





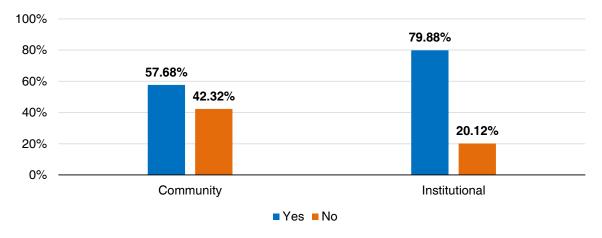
Of the total surveyed ECED centers, 33.1% reported using the Early Learning and Development Standards (ELDS). 51% of the surveyed community ECED teachers and 48% of the institutional center teachers reported using the Early Learning and Development Standards (ELDS) document in their classrooms.

The majority of ECED centers that utilize the ELDS rely on a curriculum to plan classroom activities and generate report cards.

In institutional centers, the majority of teachers reported using the ELDS for writing report cards i.e., to assess children's developmental status and share it with parents. A large number also used the ELDS to plan classroom activities. In the community centers teachers reported using the ELDS for both planning activities and generating report cards.

Furthermore, a total of 64.7% reported keeping a portfolio/record for individual children. 79.8% of institutional ECED centers reported keeping a portfolio/record whereas only 57.7% of community ECED centers reported keeping a portfolio/record.

Figure 18
Status of Portfolio/Record keeping for individuals



Another indication of the proper implementation of the curriculum and the Early Learning and Development Standards (ELDS) can be seen in the provision of homework. While neither the curriculum nor the ELDS promote homework, most ECED centers, both institutional and community ECED centers, give homework on a daily basis.

Figure 19

Type of ECED centers and Frequency of homework given

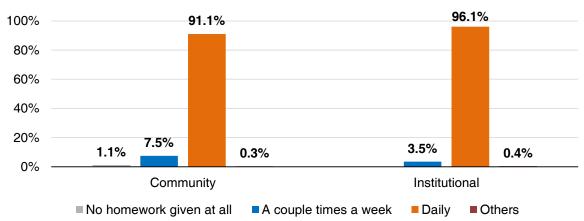
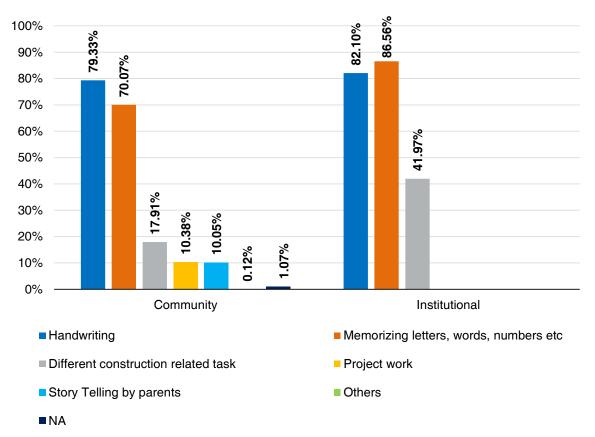


Figure 20

Types of homework given by the ECED centers



Handwriting and memorizing letters, words and numbers were the most common homework tasks given to students by both community and institutional ECED centers. Construction-related tasks (model building) were also given more by institutional ECED centers whereas there was more diversity in the types of homework given in community ECED centers.

Finally, though the curriculum and ELDS do not recommend any type of textbook or workbooks, 64% of all the ECED centers used workbooks which were published by private publishers.

3.5. Effective utilization of the learning areas

The National Minimum Standard for ECD Centers (2010AD Revised 2018AD) recommends that ECED classrooms should be arranged to accommodate specific designated areas for learning materials across subjects. The following table provides information about the six learning areas included in the standards:

Table 14

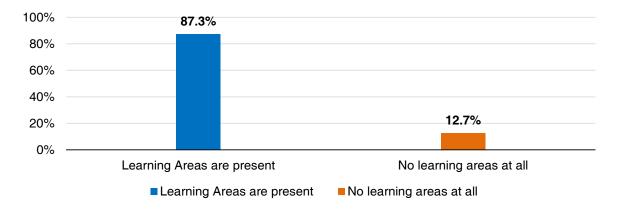
Overview of learning areas

Learning Area	Description
Language Learning Area	Relevant children's books and other reading materials
Mathematics Learning Area	Materials such as number boards, counting charts, abacuses, etc.
Role-Play Learning Area	Materials such as dolls, puppets, animal sets, etc.
Science Learning Area	Materials such as plants, colorful objects, animal sets, etc.
Creative Learning Area	Materials such as musical instruments, crayons, pictures, etc.
Constructive Learning Area	Materials such as building blocks and puzzles

Each learning area is considered as sufficient if it contains 10 or more relevant items.

Figure 21

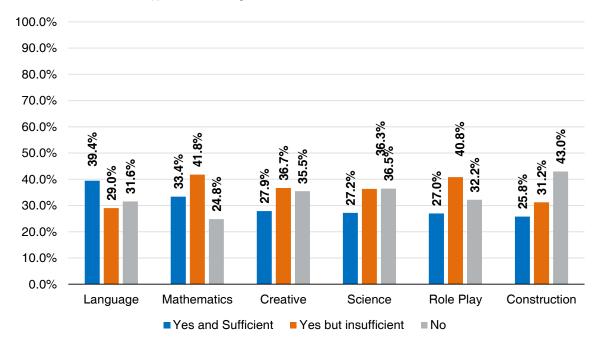
Learning areas in ECED centers



Regarding the six areas of learning, 12.7% of all the ECED centers reported having no learning areas at all. Meanwhile, 87.3% reported having one or more learning areas despite a sufficiency of materials. However, only 3.4% of this figure were found to have sufficient materials in all six learning areas.

Figure 22

Prevalence of different types of learning areas



Furthermore, Figure 22 examines the prevalence and sufficiency of each learning area for all ECED centers. 39.4% have sufficient language areas, which is the highest in the category.

3.6. Infrastructure and Other Resources

The teachers were also asked about the physical infrastructure, safety resources and community support for their centers. Overall, most ECED centers reported meeting the minimum safety and hygiene requirements, but 27% of the community ECED centers and 9% of the institutional ECED centers lack toilets; safe drinking water was not available in 20% of the community ECED centers, and 7% of the institutional ECED centers. The Flash Report (CEHRD, 2023) reported that 81.4% of basic schools have drinking water facilities whereas 88.8% had toilet facilities in their schools. Even when the centers have a toilet, it is most likely not to be child-sized, and it is also likely that there are no separate toilets for girls and boys.

Table 15

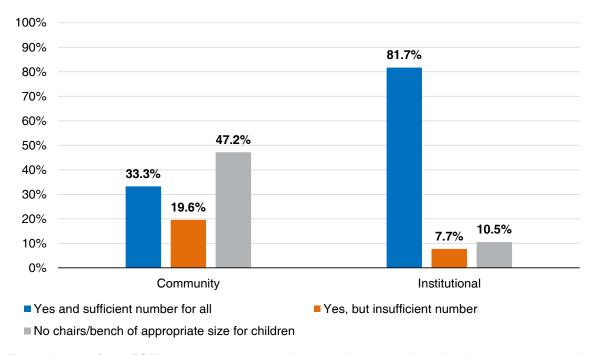
Physical Infrastructure and Safety Resources in ECED Centers

Physical infrastructure and Resources	Institutional	Community
Availability of first aid box for basic treatment for injury/accident in the last school year	95.3%	53.7%
Provision of safe water for drinking in the last school year	93.0%	80.8%
Availability of toilets in the last school year	90.2%	73.0%
Availability of separate toilets for boys and girls (if toilets available)	79.4%	51.3%
Availability of child-friendly (small-sized) toilets (if toilets available)	58.0%	32.0%
Availability of playground outside	30.6%	28.3%
Sufficiency of space for all children inside the room	80.3%	51.8%

A large variance is seen between the community and institutional ECED centers in the availability of toilets, especially the availability of separate toilets for boys and girls, the availability of first aid kits, and the lack of adequate space for the children inside the classroom. Overall, community ECED centers are less resourced compared with the institutional centers.

Figure 23

Availability of appropriate size furniture for the children



The majority of the ECED centers in community schools reported not having an appropriately sized desk, chairs and tables, while the majority of the institutional ECED Centers were sufficient in this area.

Overall, the ECED centers receive very little support from school management committees (SMCs). While both institutional and community ECED centers generally receive little material support from parents and SMCs, resources and supervision were more commonly reported as coming from SMCs than from parents. Additionally, institutional ECED centers receive a slightly larger amount of support from the parents for school meals, and from SMCs for classroom materials and resources.

Figure 24

Community Support received by ECED centers from SMCs

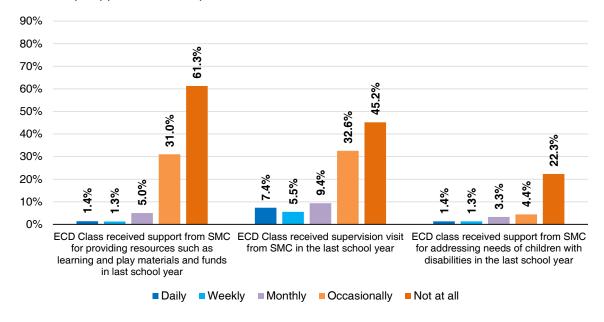
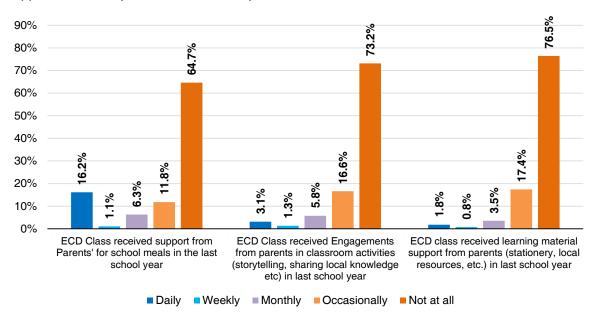


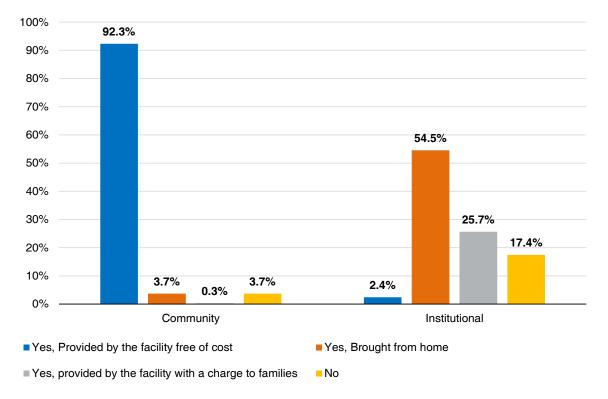
Figure 25
Support received by ECED centers from parents



The majority of ECED centers reported not receiving any support from parents. For support with meals, classroom engagement and learning materials, the percentage ranges from 64.7% to 76.5%.

Figure 26

Midday meal provided by the ECED Centers



Community ECED centers have funding allocated for the midday meals. The majority (92.3%) of the ECED centers provide midday meals free of cost. Meanwhile, a small percentage of children bring their meals from their homes. In institutional ECED centers, the majority of the children either bring from home or the meal is charged to the families.



Chapter 4

ECED TEACHER QUALIFICATIONS AND TRAINING

According to the ECD Program Implementation Guideline 2004, the formal qualification requirement for ECED teachers is the completion of Grade 10. However, no updates to this regulation have been made since then. While the government does not mandate pre-service education/training, several private institutions offer pre-service training programs for teachers

In some cases, these courses are aligned with the government-endorsed Teacher Professional Development (TPD) package, which, while not mandatory is strongly recommended for teachers in their initial years of service. As such, teachers across the country have varied access to training resources and packages, and very few directly receive pre-service education/training.

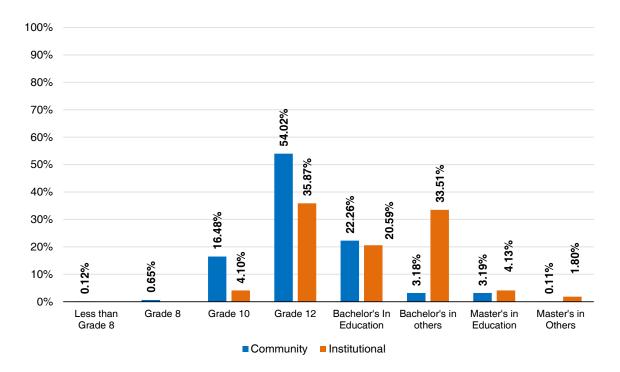
Before the TPD was formalized by the government, training offered to ECED teachers came largely from INGOs and NGOs in the region, who provided a "basic" training in the first year of service and a "refresher" course as a follow-up in later years. Over time, elements of these courses were included and formalized in what exists today as the TPD package. Given that this is a relatively recent development (the package was formalized in 2018), many teachers currently in the system may only have received the "basic" and "refresher" training, while others may have benefitted from the TPD package, with additional services depending on access to private institutions and universities.

4.1. Teacher Qualifications

When comparing the qualifications between the teachers in the community and institutional ECED centers, it is evident that teachers in institutional ECED centers generally have higher qualifications compared with teachers in community ECED centers. Almost all ECED teachers in both community and institutional ECED centers have a qualification above Grade 10 as required by the minimum standards. The majority of the teachers are qualified above Grade 12 (secondary, level) in this sample. This is also aligned with national data. According to the Flash Report (CEHRD, 2023), a total of 52,532 teachers in ECED have a level of education above SEE, which is 97.6% of all ECED teachers/facilitators (53,799 teachers reported for both community and institutional ECED centers).

Figure 27

ECED Teacher Qualification Levels



4.2. Previous work experience of teachers

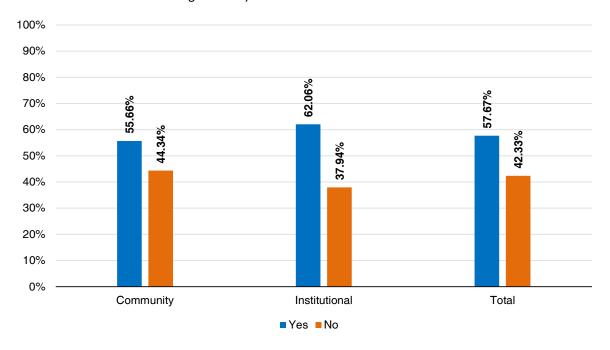
The teachers were also requested to provide information on their previous work experience in ECED. The mean work experience across the sample is just over 11 years, with community center teachers having more years of experience (mean years of experience 12.5 years) compared to the institutional center teachers (mean years of experience a little over 8 years).

4.3. Pre-Service education/training taken by teachers

In total, only 57.7% of teachers have received pre-service education/training of more than 30 days, indicating that a substantial proportion of teachers enter the system without any ECED-specific training.

Figure 28

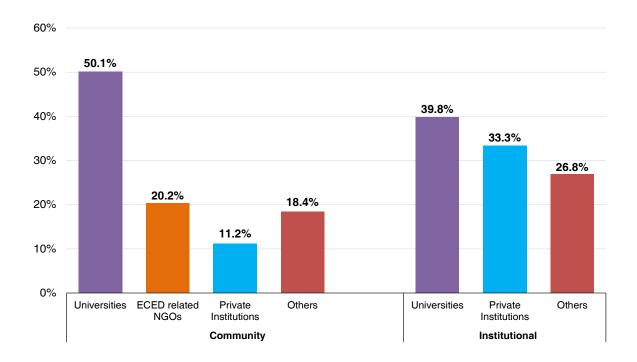
Pre-service education/training taken by teachers in ECED



When comparing teachers in community and institutional ECED centers, the teachers in community centers are less likely to have the pre-service education/training (55.7% have received training) compared with institutional centers (62.0% have received training).

Figure 29

Pre-service education/ training providers

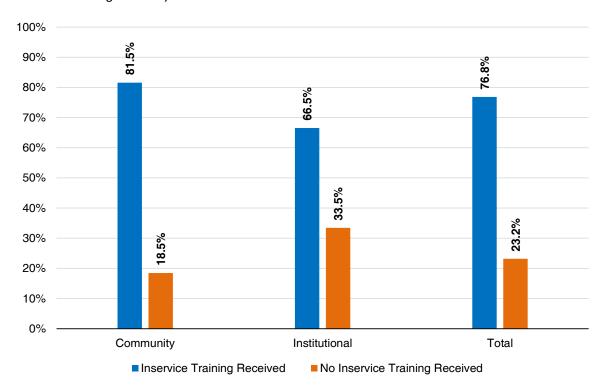


Pre-service education/training (degree level) is mostly through universities, although other private institutions are also involved. However, these might represent broader education degrees like I.Ed., B.Ed. as there are limited universities providing certificate and diploma courses for early childhood education.

4.4. In-Service Training

In-service training for teachers varies in duration and content. The data on this training are self-reported by teachers and may not fully align with the government's definition of formal training. Some of these programs include the government-endorsed TPD package, while others are provided by private institutions. There is significant variation in the number of in-service courses teachers receive, with notable differences between institutional and community ECED teachers.

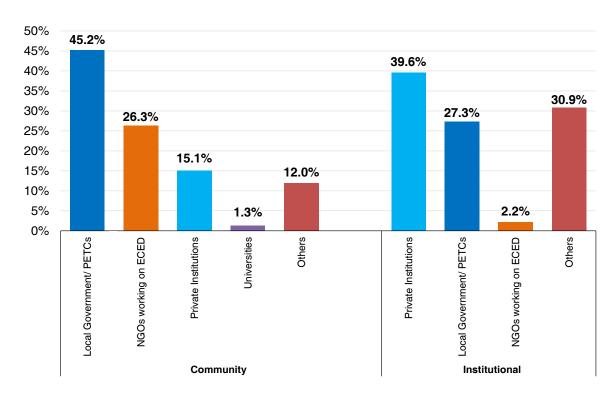
Figure 30
Inservice Training Taken by ECED Teachers



23.2% of all surveyed teachers reported receiving no in-service training. 33.45% of institutional ECED teachers and 18.5% of community ECED teachers reported receiving no in-service training at all, indicating that a larger proportion of community ECED teachers received in-service training as compared to institutional center teachers.

Figure 31

In-Service Trainaing Providers



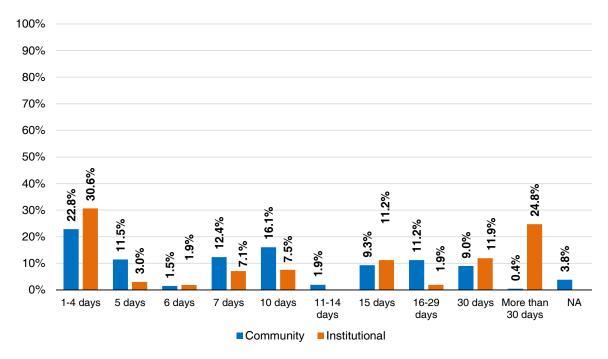
Out of the in-service training received, the sources of training for teachers vary depending on whether they work at community or institutional ECED centers. Most teachers in community ECED centers received training from local governments and provincial education training centers (45.2%). NGOs working in ECED also provided training to about 26.3% of teachers. Some teachers were trained by private institutions (12%) and universities (1.3%). Some responses were grouped under "Others," which included individuals or organizations that weren't clearly identified.

For institutional ECED centers, most training came from private institutions (39.6%), followed by government institutions (27.3%). Lot of responses (30.9%) fell under the "Others" category, where the source of training was not clearly explained.

Institutional ECED centers are more likely to engage their teachers in either very short (1-4 days) or very long training programs (over 30 days), with 30.6% providing short duration training, and 24.8% providing training of more than 30 days. In contrast, community ECED centers provide training between 5 to 15 days. For instance, 16.1% of community center facilitators received 10-day training, and 11.5% received 5-day training, which is a higher percentage compared to institutional centers. The Flash Report (CEHRD, 2023) indicates that a total of 6,348 teachers (11.7%) out of 53,799 received in-service training totaling 15 days.

Figure 32

Duration of in-service training received by the Teachers

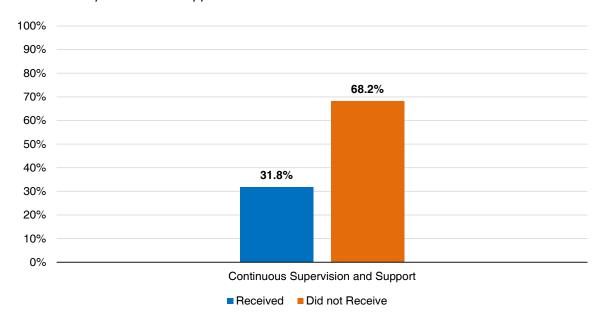


4.5. Supervision and Support

During the assessment, enumerators asked whether the ECED centers and teachers received any supervision or support from any of the stakeholders, such as local government, provincial governments, NGOs/INGOs and private institutions.

Figure 33

Continuous supervision and support



57

A significant majority of the ECED centers (68.2%) did not receive any supervision and support. 72.4% of teachers in institutional ECED centers, and 66.2% in community ECED centers did not receive such supervision and support.

Among ECED centers that received some form of support, the most common type was visits from local government representatives (60.1%). This trend is similar for both community and institutional ECED centers, with some minor but expected differences. The majority of community ECED centers received supervision from local government, whereas most institutional ECED centers were visited by private organizations. A smaller proportion (10.1%) reported receiving Supervision and support from individuals such as other teachers, headteachers and senior staff.



Chapter 5

ECED CHARACTERISTICS AND CHILDREN'S DEVELOPMENT

To explore the relationship between the cut score (dependent variable) and other factors (independent variables), a multiple regression analysis was conducted. This analysis examined how various factors related to ECED teachers and classrooms influence children's performance. However, it is important to note that these relationships should not be interpreted as causation. The analysis considered three key child characteristics—age, gender, and mother tongue—as well as additional factors such as center type and residency (Urban or Rural).

Table 16

Multiple Regression analysis

Variable	Socio- Emotional Estimate	Cognitive Estimate	Language Estimate	Physical Estimate	Composite Estimate
(Intercept)	0.4519	-0.4985	0.4407	-0.3245	0.0301
Age months	0.0107**	0.0109**	0.0063	0.0078*	0.011**
Gender (Male)	-0.109	-0.3951*	-0.1239	-0.1108	-0.2234
Primary language of instruction (Nepali)	-0.4777*	0.2782	0.0649	0.0569	-0.0339
School Type (Community)	-0.4942	-0.7179**	-1.1287***	-1.186***	-1.0728***
Urban or city (Urban only)	1.3187***	0.9455***	1.0301***	0.1006	1.0441***
Teacher Qualification (Grade 10 only)	-1.3762***	-1.311***	-1.4954***	-1.1521**	-1.6319***
Pre-Service Training (Received)	0.1913	-0.0718	0.3396	0.0898	0.1694
In-Service Training (Received)	0.053	0.228	0.5702**	0.5447*	0.4222*
Availability of Language Learning Areas	-0.7585*	-0.404	-1.3664***	-0.6018	-0.9573**
Availability of Mathematics Learning Areas (Yes)	0.3514	0.7567**	1.0084***	0.4847	0.7882**
Availability of Role-Play Learning Areas (Yes)	0.1785	0.3085	0.0948	0.3066	0.271
Availability of Science Learning Areas (Yes)	0.4932	1.2118**	1.2392**	1.0753*	1.2186**

Availability of Creative Learning Areas (Yes)	-1.6714***	-1.6906***	-2.2711***	-1.4516**	-2.1636***
Availability of Constructive Learning Areas (Yes)	1.5034**	0.3879	0.7327	0.1286	0.8571
Availability of Early Childhood Assistant (Yes)	-2.1623***	-1.6953***	-1.7951***	-1.0035***	-2.043***
Usage of curriculum (Yes)	-0.1243	0.6197*	-0.0074	0.6755*	0.3483
Usage of ELDS (Yes)	0.2074	-0.2383	-0.059	-0.3087	-0.1162

^{***}Statistically-High Significance; **Statistically-Moderate Significance; *Statistically-Marginal Significance

Interpretation of the results:

Children Characteristics:

- A child's age has been observed to have a statistically-moderate and significant-positive
 association with the socio-emotional, cognitive and composite scores. A child's age
 also shows a statistically-marginal and significant-positive association with the physical
 domain.
- Being a boy has a statistically-marginal and significant-negative association with the cognitive domain.
- The first language of instruction being Nepali has a statistically-marginal and significantnegative association with the socio-emotional domain.
- Attending a community school shows a statistically-high and significant-negative
 association with language, physical and composite development, whereas a statisticallymoderate and significant-negative association is seen in cognitive development. This
 tendency is also confirmed from the descriptive statistics elaborated in the development
 domain score comparison according to school type.
- If the location of the ECED center is in an urban area, a statistically-high and significant-positive association is seen with all the development domains of study except for the physical domain. This may be linked to resources being available in urban areas and the socio-economic status of children, which was not possible to reflect in the regression model due to limited information in this school-based survey.

Classroom Characteristics:

• The availability of caretakers has a statistically-high and significant-negative association with all the domains. There is no legal or financial provision in government guidelines for caretakers. However, if untrained caretakers are given responsibility without the presence of trained teachers, or if caretakers are doing everything for the children, the development outcomes of children may be negative. Anecdotal evidence also suggests that disagreements between teachers and caretakers may have been a factor in such a result.

- The availability of language learning areas has a statistically-high and significant-negative
 association with the language domain. There is also a statistically-marginal, significantnegative association with the socio-emotional domain, whereas there is a statisticallymoderate and significantly-negative association is observed with the composite scores.
- The availability of mathematics learning areas has a statistically-high and significantly-positive association with the language domain, a statistically-moderate and significantly-positive association with the cognitive domain, and a statistically-moderate and significantly-positive association with the composite domain.
- The availability of science learning areas has a statistically-moderate and significantly-positive association with the cognitive, language and composite domains. Furthermore, the availability of science learning areas has a statistically-marginal and a significantly-positive association with the physical domain.
- The availability of creative learning areas shows a statistically-high and a significantly-negative association with all the domains of study apart from a statistically-moderate and a significantly-negative association with the physical domain.
- The availability of constructive learning areas shows a statistically-moderate and significantly-positive association with the socio-emotional domain.

The results should be interpreted with care, as the assessment framework lacks set criteria for evaluating the quality, relevance and use of learning materials. Findings on learning areas suggest that the availability of certain materials may influence various developmental domains. It is also important to consider variations in subject area coverage and the sufficiency of materials among schools that have designated learning areas. Further studies are recommended to explore this aspect in greater depth.

Teacher Characteristics:

- Children who are taught by ECED teachers with only a grade 10 qualification show a statistically-high and negative-significant association with all domains, except for the physical domain (statistically-moderate and negative-significant association). On the other hand, a grade 12 qualification has a significant positive association with all the domains of assessment.
- Receiving in-service training has a statistically-moderate significant-positive association
 with language development. A statistically-marginal significant-positive association is
 seen with the physical and composite domains.



Chapter 6

KEY FINDINGS AND IMPLICATIONS

6.1. Children's development across ELDS domains

Key findings on children's development and learning levels:

- 1. Overall, 49.1% of the children were found to be developmentally on track, 45.3% on progressing and 5.6% on struggling category. The physical domain (69%) has the highest on track percentage while socio emotional (34%) has the lowest.
- Children who spoke a language other than Nepali were performing weakly (44.6% developmentally on track) than their Nepali speaking peers (53.5% developmentally on track).
- 3. Though the survey did not take the socio-economic status of households into account, there is a large variation between children in institutional and community schools, with 67.1% and 31.9% respectively developmentally on track.
- 4. Province-wise, the highest proportion of children in the On Track category are in Gandaki province (59.5%). Meanwhile, the highest proportion of Struggling children are in Sudurpashchim (13.7%) province. Sudurpashchim province also has highest percentage of Progressing children (60.7%).
- 5. ECED centers in urban areas are significantly better across all the domains, except the physical domain.

The difference in the average learning and development status across the provinces is significant. At the national level, this province-wise difference in children's development and learning status should be considered in policy design in order to effectively set priorities and targets. It is important to consider the fact that with minimal resources and intervention, many children who are in the Progressing category can be helped towards the On Track category. Grade 1 teachers should be aware of this so that they can receive the necessary training and support to effectively support these children reach this goal and prevent them from falling behind in later years.

6.2. ECED Class Structure

89.8% of institutional schools provide 3 to 4 years of ECED classes (such as playgroup, nursery, LKG or UKG), compared to 7.8% in community schools. The majority (83.9%) of community schools provide one year of ECED classes as guided by existing laws and regulations. Previous ECD regulation allowed the provision of childcare classes for children below the age of four.

This finding indicates a need to further strengthen policy provision in supporting local government to strictly adhere to the existing laws and regulations related to pre-primary education.

6.3. ECED Classroom Characteristics

The following are the key findings from the analysis of ECED classroom characteristics:

- Institutional ECED centers tend to have higher number of student enrollment as well as a higher number of teachers and caretakers. The teachers were found to be covering age-wise classes.
- Institutional ECED centers also tend to have better basic physical infrastructure and resources, such as sufficient space for all children inside and outside classroom, safe drinking water, toilets and first aid boxes as compared to community ECED Centers.
- The availability of caretakers in an ECED center was found to have a statistically significant negative association with children's development across all domains.

A key takeaway from the findings is the disparity in enrollment between community and institutional ECED centers. It may be valuable to explore the factors influencing parents' decisions to enroll their children in institutional ECED centers.

The negative and significant association of caretakers with certain domains requires further assessment to understand its underlying causes. It is possible that some schools are employing caretakers as substitutes for trained ECED teachers. Generally, having more caretakers should positively impact learning outcomes, but as (Sharples, Blatchford, & Webster, 2016) point out, having an assistant in the classroom does not guarantee improved learning outcomes: the results of a UK survey of 8,200 children and young people across various age groups showed an overall negative impact when an assistant was present. The cause was the inconsistent use of assistants by teachers. The researchers recommend that assistants should have a clearly defined role, that they should be prepared/trained for this role, and that they should never be used as a teaching resource.

Although learning areas are neither widely available nor sufficient in most classrooms, despite the fact that they have impacts on various developmental domains. This could be an area for further research.

6.4. ECED Teachers' Characteristics

Key findings about ECED teachers' characteristics and practice are as follows:

- ECED teachers with only a Grade 10 qualification had a significant negative association
 with the learning of the children in all domains. However, teachers qualified above or
 equal to Grade 12 had a significant positive relationship with all the domains.
- In-service training shows a significant positive association with language development,
 and a moderate positive association with physical and overall composite development.
- Only 47.9% of teachers reported following a curriculum for daily instruction, while only 33% claimed to be using the ELDS. Daily usage of curriculum shows a positive association with cognitive and physical development.

- 92.7% of the ECED centers gave homework on a daily basis. This was a similar trend in both institutional and community schools. The homework focused on handwriting and memorizing letters, words and numbers, which is against the recommendation of the curriculum.
- 64% of the ECED centers used privately published workbooks and reference materials, even though the curriculum and ELDS do not recommend the use of workbooks and reference materials by students.
- The majority of teachers reported not receiving enough support from SMCs and parents, indicating the need for further parental and community engagement.
- 68.2% teachers also indicated not receiving any supervision and support from local government, private organizations, headteachers, senior staff or colleagues.

Teachers with a Grade 10 qualification showed a significant negative association with the assessment domains, while those qualified beyond Grade 12 showed a significant positive association. This indicates that an educational qualification may be an important factor in ensuring the capacity of ECED teachers. Moreover, raising the required qualification from Grade 10 i.e., the current recommendation in the SSDP (Ministry of Education, 2016/17–2022/23) to a higher level of education, such as Grade 12, could potentially lead to the improvement in quality of ECED and enhance children's learning and development status. Since educational qualifications influence workforce value in the job market, as well as factors like trainability and work motivation, further research is needed to inform effective policy decisions.

The pre-service training received by teachers did not exhibit any association with the development domain, whereas in-service training shows a positive association with the domains of the assessment, especially the language, physical and composite domains. Given that the scope of the assessment does not cover the quality and implementation of this training, there is a need for further qualitative and detailed study on the quality of pre-service and in-service training given to teachers.

The low utilization (47.9%) of the curriculum and the ELDS, and a strong tendency to provide daily homeworks more focused on cognitive skills (like reading, writing, reciting, numeracy, memorizing etc.) has been observed in early schooling. However, such skills are only recommended during the later years of schooling. This situation calls for greater public and parental awareness raising on age-appropriate and developmentally appropriate practices. Additionally, teachers and SMCs should be equipped with the knowledge and training to effectively implement the curriculum and the ELDS.



Chapter 7

CONCLUSIONS AND RECOMMENDATIONS

The study has provided a clear picture of the current readiness status of children when they enter Grade 1. 49.1% children are in the On Track category, although there are gaps in terms of the development domain, geography, mother tongue and school type (community and institutional). With targeted support, a significant number of children (45.3%) who are in the Progressing category could shift towards the On Track category. Intensive support is required for 5.6% children in struggling category. Targeted interventions can decrease the risk of learning delays and even school drop-out later in the child's life.

Furthermore, this study has clearly portrayed gaps between the community and institutional ECED centers. However, the survey was not able to incorporate the socio-economic status of households, which largely impacts the disparities among these two, and requires further investigation.

In particular, the class structure for ECED needs to be addressed, given that the current government rules and regulations allow one year of early childhood education for four-year-olds. There is a need for broader discussion surrounding childcare for children under the age of four, given that community schools often conduct ECED programs for all children within one classroom, while institutional schools have age-wise multiple classes. Further investment, particularly in adequate human resources, is required to enhance the basic infrastructure of community ECED centers.

Given the survey's findings of a negative association between levels of teacher qualification and learning and development, upgrading the academic qualification requirement for ECED teachers to Grade 12 should be seriously considered. Additionally, both pre-service education and in-service training need to be strengthened. Since the majority of teachers do not receive supervision and support, providing greater support to teachers is essential for children's progress.

Finally, classroom practices and community engagement need to be revitalized. The implementation of the curriculum and the Early Learning and Development Standards (ELDS) remains weak, and many ECED centers place an excessive focus on academic skills, relying heavily on homework and workbooks. After carrying out a systematic literature review, (Blewitt, Skouteris, Bergmeier, & O'Con, 2020) emphasize the need for pre-school children to develop socio-emotional skills through quality teacher-child interactions which prepare them for academic learning in school. This clearly indicates that pre-school children are not ready for academic homework, and unfortunately, it is evident from this study that socio-emotional development is lagging. Based on the assessment results, the following recommendations are provided for each decision-making level, as a collective effort is needed to improve the current situation.

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Recommendations for Federal Government:

- 1. As over half of the children from Grade 1 are falling behind, it is crucial that federal leadership at both the bureaucratic and political level initiate dialogues with various stakeholders on how to overcome these challenges. (Hadley, 2024) look at how stakeholders helped in updating *The Early Learning Years Framework for Australia, 2009.* They list a range of methods used to encourage participation, such as giving full access to relevant information, giving stakeholders time to reflect on this information, and valuing what stakeholders have to say. Only the collective effort and investment of all stakeholders will improve the ECED situation in Nepal. National campaigns could be effective in raising awareness about these issues and highlighting the need to strengthen the early childhood education and development.
- 2. National policies, plans, programs, projects, training resources and conditional grants should be updated based on the study's findings in order to adequately support the needs of teachers and children.
- 3. The current educational requirement for ECED teachers (Grade 10) needs rethinking. Regression analysis shows a negative association with development domains at this level, but a positive impact when the qualification is at least Grade 12. In practice, most ECED teachers also already exceed the government's minimum requirement. Therefore, it is recommended that the minimum qualification be upgraded to Grade 12. Furthermore, the role of ECED teacher is complex, and (Nutbrown, 2021) suggests an apprenticeship scheme which would allow teachers to enter the early childhood profession at a certain level (Grade 12 in the case of Nepal), take initial training, and build up their skills through practice and reflection. Further training then becomes a route to further levels of qualification, such as Level 1 practitioner, Level 2 practitioner, etc. This is referred to as a "qualifications ladder" and would enable those who enter with a Grade 12 qualification to catch up with their more qualified colleagues, and reinforce the positive impact on the development domains.
- 4. There is a significant disparity between the number and types of ECED classes being operated and the prescribed ECED structure. This issue must be addressed to ensure that children enroll in ECED at the age of four for only one year before beginning their formal education. Additionally, better coordination is needed with the Ministry of Women, Children, and Senior Citizens and the Ministry of Federal Affairs and General Administration, as childcare oversight falls under their mandate as per the National Strategy for Early Childhood Development (NPC 2020).
- 5. Finally, children's needs are holistic and extend beyond education. Their development hinges on their health and nutritional status, for example, after carrying out a study of 896 pre-school children in Canada, Omand et al. conclude that 'higher nutritional risk in early childhood is associated with lower school readiness' (Omand et al., 2021), making the need for interministerial coordination, which is particularly important in early childhood, to ensure that children receive a variety of services in their early years. The committees envisioned by the National Strategy for Early Childhood Development provides immense opportunities for working collaboratively for the holistic development of young children.

Recommendations for Provincial Governments:

- 1. Provincial governments, especially Education Training Center (ETC), are responsible for professional development of ECED teachers.
- 2. Each province should invest in the resources required to upgrade children in the Progressing and Struggling categories to the On Track category so that they can fulfil their developmental potential.
- 3. Provincial governments must take proper steps to enhance pre-service training and education, which currently show no correlation. However, as the global Early Childhood Workforce Initiative (2018) indicates, early childhood workers need to have a clearly defined job description if pre-service training is to be effective. Partnerships with universities could help improve this. Additionally, in-service training should be strengthened through similar collaborations, because as Egert, Fukkink and Eckhardt (2018) confirm after analyzing 36 studies that included 2,891 ECED teachers from The Netherlands, in-service training improves quality in the classroom, which improves learning outcomes.
- 4. Further collective discussion and initiatives are required to strengthen on-site supervision and support for ECED teachers which strengthens ECED.

Recommendations for Local Government:

- Overall regulation, management, monitoring and supervision of the ECED centers are
 the responsibility of local government. Local government needs to ensure that the ECED
 centers have basic infrastructure and are running based on national curricular goals
 and as per the early learning and development standards. However, as (Peacock, 2022)
 advocates in the case of South Africa, municipalities can only succeed in this role when
 federal government commits capacity and funding.
- 2. Based on the class structure data, there is a need for regulatory action on maintaining standard approaches among community and institutional ECED centers. There is a need for alignment with national and provincial standards, along with clear regulations ensuring early childhood care and education are age- and development-appropriate.
- 3. As the report does not provide a local government level report, local government is recommended to develop their own internal monitoring and evaluation mechanism to confirm children's learning and development status. As per the national standards, ECED teachers are required to implement ELDS-based formative assessment within the classroom, which is capacitated through Teacher Professional Development. Local government should coordinate with provincial training centers to ensure ECED teachers are trained on this. Furthermore, there is also a customized training Package for Grade 1 teachers to capacitate them on achieving school readiness for pre-school children.
- 4. On-site support and supervision are crucial for teacher support and classroom quality assurance, and have been shown to be especially useful when teachers have to align their practice with new policies and curriculum initiatives (Twigg et al., 2013). Local government has played a key role in this effort, but further strengthening is needed.

5. Further guidance from local government is also recommended to help schools mobilize parental and community support.

Recommendations for Schools:

- 1. Schools should recognize ECED centers as the foundation for learning, and align with curricular goals and standards. Basic infrastructure must be prioritized from ECED through the early grades. While the curriculum and standards focus on holistic development, survey findings indicate an overemphasis on homework and workbooks, which should be minimized. Moreover, as (Eckhoff, 2023) asserts, reading and writing focused homework is only possible if someone at home is available to support the young child, which is not always the case. She also adds that there is no evidence of homework making young children responsible or preparing them for the rigors of schoolwork.
- 2. A significant source of academic pressure comes from parents who lack awareness of curricular goals. To address this, communication must be improved, and parenting education should be integrated into regular meetings. One example of good practice is by the Early Childhood Leadership Commission from Colorado, USA, who have designed an evidence-based A Checklist for Engaging with Parents & Caregivers for early childhood professionals that will improve communication and awareness raising. Moreover, there is also Parenting Eductaion National Package promoted by CEHRD, which could be more supportive in local context.
- 3. Parental and community involvement is essential for achieving curricular goals, yet survey findings indicate low engagement. Schools should implement various initiatives to strengthen their active participation.
- 4. Teachers are key agents of change in ensuring children's learning and development. ECED and Grade 1 teachers should be respected, motivated and provided with regular training and support. One effective approach is to establish communities of practice, such as mobile meetings with nearby schools, to encourage reflection and continuous skill development. It is important to note though, as indicated by (Thornton, K., & Cherrington, S, 2018) in their study of ECED communities of practice in New Zealand, that for these communities to be sustainable there needs to be clear membership and roles, a shared focus, an openness to discuss practice and access to new ideas.

In conclusion, a significant proportion of Nepal's young children remain in need of targeted support to bridge the gap between the Struggling category and the On Track category, and reduce future learning delays. As per the data and recommendations, strengthening early childhood education through targeted interventions, policy improvements and adherence to ECED standards will be key to addressing these disparities. Moving forward, a coordinated effort among federal, provincial and local government, along with schools and stakeholders, is essential to ensure that the children of Nepal receive the holistic development they need for a bright future.

REFERENCES

- Blewitt, C., Skouteris, H., Bergmeier, H., & O'Connor, A. (2020). Social and emotional development in early childhood. In A. Kilderry & B. Raban (Eds.), Strong foundations: Evidence informing practice in early childhood education and care (pp. 109–123). ACER Press. https://doi.org/10.37517/978-1-74286-555-3_8
- Centre for Education and Human Resource Development (CEHRD). (2018). National Minimum Standards for Early Childhood Development (ECD) Centers. Ministry of Education, Science and Technology, Government of Nepal.
- Centre for Education and Human Resource Development (CEHRD). (2023). Flash Report 2022–23. https://cehrd.gov.np/file_data/mediacenter_files/media_file-17-428622471.pdf
- Department of Education (DoE). (2010). National Minimum Standards for Early Childhood Development (ECD) Centers. Ministry of Education, Government of Nepal.
- Eckhoff, A. (2023). Engineering to understand: Reflections on a learning and teaching partnership for preservice early grades teachers and preschoolers. Journal of Early Childhood Teacher Education, 44(1), 118–142. https://doi.org/10.1080/10901027.2022. 2107604
- Greenberg, E. (2017). In DC, new child care regulations are a promising start. Urban Institute. https://www.urban.org/urban-wire/dc-new-child-care-regulations-are-promising-start
- Hadley, R. A. (2024). Muted voices of invisible men: The impact of male childlessness. In K. Wilkinson & H. Woolnough (Eds.), Work-Life Inclusion: Broadening Perspectives Across the Life-Course (pp. 135–146). Emerald Publishing. https://doi.org/10.1108/978-1-80382-219-820241011
- Hambleton, R. K., & Powell, S. (1983). A framework for viewing the process of standard setting. Evaluation and the Health Professions, 6(1), 3–24. https://doi.org/10.1177/016327878300600101
- Hsu, N. (2016). Education Requirements for Early Educators: How D.C. Is Doing It. New America. https://www.newamerica.org/education-policy/edcentral/education-requirements-for-early-educators/
- Kane, M. T. (1994). Validating the performance standards associated with passing scores. Review of Educational Research, 64(3), 425–461.

- Karantonis, A., & Sireci, S. G. (2006). The Bookmark standard-setting method: A literature review. Educational Measurement: Issues and Practice, 25(1), 4–12.
- Kitamura, K., & Acharya, S. P. (2022). Early Learning and Development Standards Assessment Technical Report: Evidence for Validity and Reliability. Education Review Office. https://www.ero.gov.np/upload_file/files/post/1658256308_931108538_ELDS%20 Assessment%20Technical%20Report_draft_final.pdf
- Kitamura, K., Shreeraman, S., Seiden, J., Shakya, D., & Adhikari, R. (2024). Improving Measurement Efficiency of the Early Learning and Development Standard Assessment Tool in Nepal. OSF Preprints. https://doi.org/10.31234/osf.io/p3ehz
- Ministry of Education. (2016). School Sector Development Plan, Nepal, 2016–2023.

 Government of Nepal. https://www.globalpartnership.org/sites/default/files/2019-05-nepal-education-sector-plan.pdf
- National Planning Commission (NPC). (2020). National Strategy for Early Childhood Development 2077–2088. https://npc.gov.np/images/category/ECD_Strategy_2077-88. pdf
- National Statistics Office [NSO]. (2021). Nepal Population and Housing Census 2021. Government of Nepal.
- Nutbrown, C. (2021). Early childhood educators' qualifications: A framework for change.

 International Journal of Early Years Education, 29(3), 236–249. https://doi.org/10.1080/09669760.2021.1892601
- Omand, J. A., Janus, M., Maguire, J. L., Parkin, P. C., Aglipay, M., Randall Simpson, J., ... & Birken, C. S. (2021). Nutritional risk in early childhood and school readiness. The Journal of Nutrition, 151(12), 3811–3819. https://doi.org/10.1093/jn/nxab307
- Peacock, R. (2022). EAP for the 21st Century: The UNNC Impact: Initiating Change: Tracking 'Experienced Novices' Experiments with Communicative Language Teaching in Chinese Middle-School English Classrooms. In P. Knight & R. Smith (Eds.), Shanghai: Shanghai Foreign Language Education Press.
- Plake, B. S., & Impara, J. C. (1997). Standard setting: An alternative approach. Journal of Educational Measurement, 34(4), 353–366.
- Reckase, M. D. (2006). A conceptual framework for a psychometric theory for standard setting with examples of its use for evaluating the functioning of two standard setting methods. Educational Measurement: Issues and Practice, 25(2), 4–18. https://doi.org/10.1111/j.1745-3992.2006.00052.x

- Sharples, J., Blatchford, P., & Webster, R. (2016). Making best use of teaching assistants: Guidance report. Education Endowment Foundation. https://educationendowmentfoundation.org.uk/tools/guidance-reports/making-best-use-of-teaching-assistants
- Sireci, S. G., & Hambleton, R. K. (1992). A survey of national professional licensure examination programs. CLEAR Exam Review, 3(1), 21–25.
- The Act Relating to Compulsory and Free Education. (2018). An Act Made to Provide for Compulsory and Free Education. Nepal Gazette.
- Thornton, K., & Cherrington, S. (2018). Professional learning communities in early childhood education: A vehicle for professional growth. Professional Development in Education, 45(3), 418–432. https://doi.org/10.1080/19415257.2018.1529609
- Twigg, S. R. F., et al. (2013). Reduced dosage of ERF causes complex craniosynostosis in humans and mice and links ERK1/2 signaling to regulation of osteogenesis. Nature Genetics, 45(3), 308–313. https://doi.org/10.1038/ng.2539
- UNICEF. (2012). School readiness: A conceptual framework. https://resources.leicestershire. gov.uk/sites/resource/files/field/pdf/2020/1/7/School-readiness-a-conceptual-framework-UNICEF.pdf
- Zieky, M., & Perie, M. (n.d.). A primer on setting cut scores on tests of educational achievement. Educational Testing Service. https://www.ets.org/research/policy_research_reports/publications/publication/2006/dbkw.html

ANNEXES

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Assessment Framework for the ELDS

Physical Giross notice - Demonstrate coordination of body parts - Skills concentrate coordination of body parts - Skills concentrate coordination of body parts - Skills concerned to the part of the	Subdomains	Aspects		Standards		Tasks
Gross motor skills Fine motor skills Coordinate and use fine motor body-parts Demonstrate hand-eye coordination Use tool, instruments, objects with control Sensory motor Sensory motor Show reactions and responses to skills and practices Are place Have understanding of safe practices Avoid harmful and dangerous objects Avoid harmful and dangerous objects Avoid harmful and dangerous objects				Physical development		
Fine motor skills Coordinate and use fine motor body-parts Demonstrate hand-eye coordination Use tool, instruments, objects with control skills Sensory motor something using senses skills Have understanding of safe practices Have understanding of safe practices Avoid harmful and dangerous objects	Physical development	Gross motor skills	•	Demonstrate coordination of body parts	• •	Walk along straight line balancing the whole body Stretch, bend and touch own feet
Fine motor skills • Coordinate and use fine motor body-parts • Demonstrate hand-eye coordination • Use tool, instruments, objects with control • Sensory motor • Show reactions and responses to skills • Demonstrate health and hygiene behaviors and practices • Have understanding of safe practices • Avoid harmful and dangerous objects					•	Move some steps backward
Fine motor skills • Coordinate and use fine motor body-parts • Demonstrate hand-eye coordination • Use tool, instruments, objects with control • Use tool, instruments, objects with control • Sensory motor • Show reactions and responses to skills • Something using senses and practices • Have understanding of safe practices • Have understanding of safe practices • Avoid harmful and dangerous objects • Avoid harmful and dangerous objects					•	Jump some steps with both feet
Fine motor skills • Coordinate and use fine motor body-parts • Demonstrate hand-eye coordination • Use tool, instruments, objects with control • Show reactions and responses to skills • Something using senses • Demonstrate health and hygiene behaviors • and practices • Have understanding of safe practices • Avoid harmful and dangerous objects • Avoid harmful and dangerous objects • Avoid harmful and dangerous objects					•	Hop turn by turn on one foot
Fine motor skills Demonstrate hand-eye coordination Use tool, instruments, objects with control skills Sensory motor skills Sensory motor skills Demonstrate health and hygiene behaviors and practices Have understanding of safe practices Avoid harmful and dangerous objects Avoid harmful and dangerous objects					•	Crawl on the ground
Fine motor skills Coordinate and use fine motor body-parts Demonstrate hand-eye coordination Use tool, instruments, objects with control Sensory motor Show reactions and responses to skills something using senses and practices and practices Have understanding of safe practices Avoid harmful and dangerous objects Avoid harmful and dangerous objects					•	Climb up/down ladder, slopes, and steps
Fine motor skills Coordinate and use fine motor body-parts Demonstrate hand-eye coordination Use tool, instruments, objects with control skills Sensory motor Show reactions and responses to skills Something using senses and practices Have understanding of safe practices Safe place Avoid harmful and dangerous objects Avoid harmful and dangerous objects					•	Lift and carry a small char of their size
Fine motor skills Demonstrate hand-eye coordination Use tool, instruments, objects with control Use tool, instruments, objects with control Sensory motor S					•	Throw and catch small objects from short distance
Sensory motor Show reactions and responses to skills something using senses and practices and practices after place Have understanding of safe practices Avoid harmful and dangerous objects Avoid harmful and dangerous objects		Fine motor skills	• •	Coordinate and use fine motor body-parts Demonstrate hand-eve coordination	• •	Tear paper or leaves into pieces Thread various small objects, such as beads and corncobs Do up
Sensory motor Show reactions and responses to skills something using senses and personal hygiene Demonstrate health and hygiene behaviors and practices and practices safe place Have understanding of safe practices Avoid harmful and dangerous objects			•	Use tool, instruments, objects with control		buttons
Sensory motor Show reactions and responses to skills something using senses and responses to something using senses and practices and practices and practices and practices Avoid harmful and dangerous objects Avoid harmful and dangerous objects					•	Click fingers
Sensory motor Show reactions and responses to skills something using senses and personal hygiene Personal hy					•	Color within a boundary
Sensory motor Show reactions and responses to skills something using senses and responses to sensing senses something using senses and practices and practices and practices and practices services safe place Have understanding of safe practices Avoid harmful and dangerous objects					•	Do simple weaving
Sensory motor Show reactions and responses to something using senses and personal hygiene behaviors and practices and practices safe place Have understanding of safe practices Avoid harmful and dangerous objects					•	Draw lines, circles, and patterns
Sensory motor Show reactions and responses to skills something using senses and personal hygiene behaviors and practices and practices safe place Have understanding of safe practices Avoid harmful and dangerous objects					•	Fold paper
Sensory motor Show reactions and responses to something using senses or something using senses and personal hygiene behaviors and practices and practices or Have understanding of safe practices or Avoid harmful and dangerous objects or sense or something or safe practices or safe place or safe practices or safe place or safe practices or safe place or safe					•	Cut and paste small objects
Sensory motor Sensory motor Sensory motor Skills something using senses one-thing of senses one-thing using senses one-thing senses					•	Mold and manipulate wet sand, dough or clay
skills something using senses • Demonstrate health and hygiene behaviors • and practices and practices • Have understanding of safe practices • Avoid harmful and dangerous objects		Sensory motor	•	Show reactions and responses to	•	Imitate, identify, and differentiate sounds Follow given rhythm
nd Personal hygiene • Demonstrate health and hygiene behaviors • and practices • Have understanding of safe practices • Avoid harmful and dangerous objects		skills			•	Show a reaction to things with various feelings (smooth vs. rough,
nd Personal hygiene • Demonstrate health and hygiene behaviors • and practices • Avoid harmful and dangerous objects • Avoid harmful and dangerous objects • Personal hygiene behaviors • • Avoid harmful and dangerous objects • • Avoid harmful and dangerous objects					•	side vs. sort, etc.) See and distinguish objects far and near using each eve in turn
nd Personal hygiene • Demonstrate health and hygiene behaviors • and practices • Safe place • Have understanding of safe practices • Avoid harmful and dangerous objects						Respond to different tastes (sweet, sour, bitter, etc.)
safe place Avoid harmful and dangerous objects	Health and	Personal hygiene	•	Demonstrate health and hygiene behaviors	•	Maintain their body, including nose, hand, nail, feet and teeth, neat
Have understanding of safe practices Avoid harmful and dangerous objects	hygiene			and practices		and clean
Have understanding of safe practices Avoid harmful and dangerous objects					•	Show awareness of dirt vs. clean objects and food
 Have understanding of safe practices Avoid harmful and dangerous objects 					•	Follow proper toilet practice
•		Safe place	• •	Have understanding of safe practices Avoid harmful and dangerous objects	•	Show awareness of danger of fire, electricity, sharp objects and
					•	Show familiarity with signs of danger and poisons and avoid them

ANNEX 2:

Tools and background survey (Translated version)

Education Review Office

Early Learning and Development Standard Assessment Tool

Section A: Background Information

1)	Name of enumerator:
2)	Date:
3)	Province:
4)	Districts:
5)	Name of school:
6)	School's code no.:
7)	Name of child:
8)	Child's sex: Girl Boy Boy
9)	Child's birthday (Day) (Month) (Year)
10)	Child's Mother Tongue:
	01 = Nepali; 02 = English; 03 = Maithili; 04 = Bhojpuri; 05 = Tharu; 06 = Tamang; 07 = Magar;
	08 = Newari; 09 = Bajjika; 10 = Dotyal; 98 = Other, (Specify)
11)	Has the child attended ECD center before enrolling in Grade 1?
	00 = Did not attend (directly enrolled to grade 1); 01 = Attended the ECD center of this school;
	02 = Attended another ECD center (Specify)
12)	Does the child have any disability?
	00 =No; 01 = Yes (Specify)

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Section B: Learning and Development Standard Assessment

Guide to Enumerator

All the activities of Section B should be conducted independently by the enumerators for quality and reliability. Before conducting any activities give them instruction and procedure clearly and give examples as well. For the management and preparation of the working environment, take help from the facilitator. For the operation and assessment of activities, score the point in the given method below.

Please remember, all the **procedures and instructions** written in bold letters are to be read/performed by the enumerators.

Before beginning any assessment, it is important to establish a relaxed and playful rapport with the child. Ask him/her a few questions about themselves (such as their name, where they live, other subjects of interest) and introduce yourself as follows:

Namaskar. My name is I live in...... I am also involved in teaching young children like you. I have come to talk with you and see what kind of games you know that you can do. Please tell me what you know.

Assessment Questionnaire

S. no. 1. Social Development: Self-concept Activity: Expressing oneself

Materials: None

Procedure and Instruction:

- Ask the age of the child.
- Now I will ask you a question. Are you ready? Thank you.
 - o How old are you?
- Score according to the child's performance.
 - The child can verbally say their age or show it with their fingers. Any response that is around 2 years above or below the estimated age is considered correct.

Question	Answer age (2)	Do not response (-)
A. How old are you?		

S. no. 2. Cognitive Development. Activity: Arranging puzzle

Materials: Picture of Dog and its 4 equal dimensional puzzles

Procedure and Instruction:

- Attract the child's attention and show the picture of the dog. Then hand over the pieces
 of puzzle to the children and ask them to arrange the puzzle according to the picture.
 Give them 1 minute to complete.
- Today we will play several games. First, let's play a puzzle. Look at me. (show the picture of a dog) This is a dog. Now, I will give you these pieces of the puzzle. You have to make a dog from these pieces.
- Score according to the child's performance.
 - What is important in the scoring is how many pieces are in the right/appropriate place in relation to the whole image (how the parts relate to the whole)
 - If the child completes the puzzle upside down, that is scored as correct.

Materials	Arrange all pieces correctly (2)	Arrange two or three pieces correctly (1)	Could not arrange (0)	Do not response (-)
Puzzle				

S. no. 3. Cognitive Development Activity: Knowledge of numbers

Materials: Separate cards of the different pictures of objects with numbers 4, 3, 6

Procedure and Instruction:

- Show the pictures to the children and consequently ask them how many are there in order.
- Look at these papers. Here are some pictures. (Showing them first picture) How many fish are there? (Showing second picture) How many cows are there? Ask continuously.
- Score according to the child's performance.

Materials	Correct answer (2)	Wrong answer (0)	Do not response (-)
First (Fish)			
Second (Cow)			
Third (Cat)			

S. no. 4. Language Development Activity: Copying shapes

Materials: Pencil and A4 sheet

Procedure and Instruction:

- Provide a pencil and A4 sheet to each child to write. Enumerators will write the following shapes and ask the child to copy these in the given paper on by one: 1) Half circle, 2) Slanting line, 3) U-shape
- Look, here is something written in the paper (half circle). Can you see it?

 Thank you. Now, copy it as shown in the paper. (Continue for the rest of shapes)
- Score according to child's performance
 - If the child draws the shapes in wrong directions (i.e., half circle, slanting line, U-shapes), that is considered as not correct.

	Shape	Written correctly (2)	Not written correctly (0)	Do not response (-)
Α	Half circle:)			
В	Slanting line: /			
С	U-shape: U			

S. no. 5. Cognitive Development Activity: Creative Art

Materials: A card with five circles.

Procedure and Instruction:

- Attract the attention and provide the card with five circles. Ask children to complete the circles by coming up with different items.
- Provide 2 minutes for the activity.

Look at this paper. Here are five empty circles. Please come up with and draw different objects which you see every day or you imagine, using these circles.

Score according to the child's performance.

Aspect	Draw 4 or 5 objects (2)	Draw 1-3 objects (1)		Do not draw (-)
A. Fluency: how many responses				
	Draw 4 or 5 different objects (2)	Draw 2-3 different objects (1)	Draw all the same objects (0)	Do not draw (-)
B. Flexibility: how many types of responses				

S. no. 6. Language Development: Pre-reading Activity: Naming objects and initial letters
Materials: A card with the picture of Pigeon (Pareva) and Makai (corn)

Procedure and Instruction:

- Start with the demonstration of the activity by showing the picture of Pareva and saying "this is a pigeon and its first letter is p". Then, show the picture of Makai and ask children to name the object and identify its first letter. If the child cannot correctly answer the name of the object, enumerators should tell the name of the object before asking its first letter ("This is Makai. What is the first letter of Makai?")

Now, we will play another game. I will show you a picture of an object and ask you to name the object and its first letter. First, let's practice. (Show Pareva). This is 'Pareva' and its first letter is 'P'. Now, it's your turn.

- Please tell me the name of the object (Show Makai). What is the first letter of 'Makai'? Thank you.
- Score according to child's performance

Object		Correct name/ letter (2)	Incorrect name/letter (0)	Do not response (0)
Makai (corn)	Naming			
	Initial letter			

S. no. 7. Language Development: Pre-reading Activity: Identifying alphabet

Materials: Alphabet card

Procedure and Instruction:

- Show the Nepali alphabet cards (ख, घ) in order and let the child identify them.

Now, let's identify alphabets. I will show alphabets. You answer what those alphabets are. (show ৰ) Thank you. (show ৰ) Thank you.

- Score according to the child's performance.

Shown alphabets	Correct answer (2)	Incorrect answer (0)	Do not response (-)
First Nepali alphabet ख			
Nepali alphabet घ			

S. no. 8. Language Development: Listening Comprehension Activity: Comprehending story
Materials: Short story

Procedure and Instruction:

- Read aloud the short story slowly, clearly and in a fair and neutral rhythm. Then, sequentially
 ask the questions, and score as mentioned in the assessment tool.
- Make sure the child can hear you if you are in a very noisy area get closer to the child
- The story cannot be repeated
- Ask each question slowly and clearly. Each question may be repeated ONCE if needed.
- Now I am going to tell you an interesting story. After I have told you the story I will ask you some questions. I will just read once, so listen carefully, okay?

There was a fat cat. He always wore a red hat. One day when he was sleeping, a small mouse came silently and stole the hat. The cat woke up to find his hat gone. He got very angry and started chasing the mouse.

- a. "Who stole the cat's hat?"
- b. "What color was the hat?"
- c. "Why did the cat chase the mouse?"
- Score according to child's performance

Questions	Correct answer (2)	Incorrect answer (0)	Do not response (-)
A. "Who stole the cat's hat?" (Correct: the mouse)			
B. "What color was the hat?" (Correct: red)			
C. "Why did the cat chase the mouse?" (Correct: because the mouse took/stole its hat)			

S. no. 9. Physical Development: Gross motor Activity: Hopping on one-foot

Materials: None

Procedure and Instruction:

 First, show the activity by hopping for 5 times with any one foot. Ask children to hop 5 times with lifting one foot.

Now, we will play lifting one foot up. First, I will perform. Observe carefully. First, I will hop five times by lifting a foot (hop five times). Now, you also hop for 5 times by lifting one foot at one place.

- Score according to child's performance
 - Count the number of continuous hops (hops during which the child doesn't put his foot down or hold onto something) the child makes.
 - o If children put both of his/her feet down, hold onto something, or move around while hopping, score 0.

Performed activity	Hop 5 times correctly (2)	Hop less than 5 times correctly (1)	Hop incorrectly (0)	Do not response (-)
Нор				

Materials: Pencil and the dotted picture of the flag (one fourth of A4 size)

Procedure and Instruction:

Provide children with a dotted flag picture in quarter sized A4 sheets and a pencil. Then ask them to shape by joining dots. Give 1-minute time.

I will give you a paper. The paper has a dotted figure of the flag. Draw the flag by joining the dots properly with straight lines.

- Score according to child's performance based on the two scoring dimensions
 - In dimension A, if the corners are little rounded, there is a tiny little space between the two lines making the corner or the child extends/overshoots the lines past the corners, you can still accept them as closed corners.
 - In dimension B, score the performance based on the reference.

Scoring dimensions	3 closed corners (2)	1-2 closed corners (1)	No closed corners (0)	Do not perform (-)
A. Number of closed corners, no gaps				
	Resemble flag by joining dots properly (2)	Resemble flag by joining dots improperly (1)	Do not join dots completely (0)	Do not perform (-)
B. Resemble closely the picture (form flag by joining dots)				

Materials: Soft ball with 6 to 8 centimeter dimension

Procedure and Instruction:

 You and the child should be in two-meter distance facing each other. You will throw the ball to the child, and the child catches it. Then, the child will throw it back to you. Repeat three times.

Child, I will throw this ball towards you. Catch properly. Then you too throw the ball toward me similarly, I will catch.

- Score according to the child's performance.
 - Throwing properly means that children throw the ball in front of the enumerators' body.

Performed Activity	Throw 3 times properly (2)	Throw less than 3 times properly (1)	Throw 3 times improperly (0)	Do not perform (-)
A. Throwing task				
Performed Activity	Catch 3 times properly (2)	Catch less than 3 times properly (1)	Could not catch all 3 times (0)	Do not perform (-)

S. no. 12. Physical Development: Sensory motor Activity: Sensory identification

Materials: None

Procedure and Instruction:

Play the recorded high and low tone sounds in order and ask him/her to identify which
is low.

Now, let's play another game.

- o I will play two sounds, and once you hear them, I will ask you which is in low pitch/tone (play the sounds one by one). Ok, please tell me, which was low pitch/tone, the first one or the second one?
- Score according to the child's performance.

Performed Activity	Identify correctly (2)	Identify incorrectly (0)	Do not perform (-)
A. Identify low tone			
sound			

S. no. 13. Cognitive Development Activity: Sorting shapes and colors

Materials: Picture cards of stars and circles (two red stars and one yellow star, two yellow circles and one red circle)

Procedure and Instruction:

Place the picture cards in front of the child and say:

We're going to play a game where we group pictures together that are similar. Look at these cards and try to arrange all of them in two groups with others that are alike. Use all the cards and put one group here and one group here (physically show with the hands).

 Once the child has completed sorting by one criterion, do NOT move the piles back together and say,

Ok now look at the cards again and try to find another/different way to group these cards.

- Be patient and wait as the child tries to examine how to arrange the cards.
- Score according to the child's performance.

Performed Activity	Sort all cards correctly into the two groups (2)	Sort some but not all cards correctly into the two groups (1)	Not sort cards correctly into the two groups at all (0)	Do not respond (-)
Sort by first criterion				
Sort by second criterion				

S. no. 14. Cognitive Development Activity: Concept of Time

Materials: None

Procedure and Instruction:

Tell the day of the assessment. Ask them in order; Which day was yesterday? Which day is tomorrow?

Today is day. Now tell me which day yesterday was. Thank you. Which day is tomorrow?

- Score according to child's performance

Materials	Correct answer (2)	Incorrect answer (0)	Do not respond (-)
Yesterday			
Tomorrow			

S. no. 15. Cognitive Development Activity: Identification of means of transportationMaterials: Picture of bus and airplane.

Procedure and Instruction:

- Show the paper with the picture of bus and airplane, then ask about their usage.

Children, look here. There are two pictures in the paper.

(Showing picture of bus and airplane) For what purpose are they used? What can we do with them?

- Score according to children's responses.
 - Correct answers can be anything one can do with the objects and are not limited to the main usage: e.g., correct answers for 'bus' can include but not be limited to going to a relative's house, traveling to school, etc. If a child gives answers related to toy bus or cartoon bus, redirect them to talking about buses in real life.

Materials	Correctly answer both (2)	Correctly answer any one (1)	Incorrect answer (0)	Do not respond (-)
A. Mode of				
Transportation				

S. no. 16. Social Development Activity: Identifying relationship with friends

Materials: None

Procedure and Instruction:

- Ask the child to name any three friends.

Children, tell me the names of three of your friends?

- Score according to child's performance
 - o Friends can be from school, community, or other peer networks.
 - o Animals or imaginary friends/cartoons don't count.
 - If a child repeats the same name don't count it twice unless it is clear that they are referring to two different people.

Tell name of 3 friends clearly (2)	Tell name of 2 or 1 friends clearly (1)	Tell that he/she has no friend (0)	Do not respond (-)

S. no. 17. Emotional Development Activity: Empathy

Materials: A picture of crying child lying on the ground

Procedure and Instruction:

- Show the picture of a crying child lying on the ground. Do not mention that the child is crying before asking the question:
- Now let's look at this picture. What would you do if your friend was like this, as shown in the picture?

If the child is unable to answer or identify what the emotion is, you can give a hint: This child is feeling hurt, sad, or upset. What would you do if your friend was like this, as shown in the picture?

- Score according to the child's performance.
 - Appropriate responses are actions that may help the friend feel better: ask how
 he is doing, hug him, tell him he will be OK, find out if he needs medicine, play
 with him, hold his hand, get an adult to help him or other acceptable answers.

٤	8	88	88

	Give a correct response for how to make friend feel better (2)	Give an incorrect response for how to make friend feel better (0)	Do not respond (-)
A. Gives one response			
for how to make friend feel better			

S. no. 18. Emotional Development Activity: Emotional awareness/regulation

Materials: None

Procedure and Instruction:

- Ask the child what makes him/her feel scared (question A). If the child can properly answer, ask him/her what he/she would do to feel better when he/she is feeling scared (question B). If the child provides one response (whether appropriate or inappropriate), probe to get a second response. Then, ask the child what makes him/her feel happy (question C).
 - A. Now I have some questions about feelings. Think for a moment and tell me what makes you feel scared. (Wait for the child to respond and if answer is unclear ask, "How/why does that make you scared?")

If child cannot name something that makes them scared, skip to question c) about happiness).

A. Then ask, What do you do to feel better when you are feeling scared? (Wait for the child to respond and if answer is unclear ask, "How/why does this make you feel better?")

If child cannot name something that makes them feel better, skip to question c) about happiness.

- A. Continue and ask: What else do you do to feel better when you are feeling scared? (Wait for the child to respond and if answer is unclear ask, "How/why does this make you feel better?")
- B. Finally, ask: Now tell me what makes you feel happy." (Wait for the child to respond and if answer is unclear ask, "How/why does that make you happy?")
- Score according to the child's responses.
 - In question B, coping responses are correct if they display that the child is trying to self-soothe: e.g., trying to call someone, run away from a scary situation. Crying is an acceptable response.

	Clearly identify something that makes them scared (2)		Try to identify something that makes them scared but not clear (0)	Do not response (-)
Question A				
	Gives two appropriate responses (2)	Gives one appropriate response (1)	Gives only inappropriate responses (0)	Do not response (-)
Question B				
	Clearly identify something that makes them happy (2)		Try to identify something that makes them happy but not clear (0)	Do not response (-)
Question C				

S. no. 19. Social Development Activity: Solving conflict

Materials: None

Procedure and Instruction:

Tell the situation and ask the child how he/she would solve the problem. If the child provides
one response (whether appropriate or inappropriate), probe to get a second response.

Now I will ask you to imagine a situation where you are playing with a toy that you like when another child wants to play with that same toy, but there is only one toy. What would you do in this situation? (*Prompt ONCE by asking after the first response*) Is there anything else you would do? (*Do not refer to this other child as "friend"*.)

- Score according to the child's performance.
 - Appropriate answers for solving conflict convey that the child understands concepts and can identify concrete strategies for solving the problem. Some examples could be: talk to the child and ask him to wait, take turns, share, get another toy, and play together with the toy. An "appropriate response" is one where the child demonstrates an ability to negotiate the situation favorably, in a way that the other child is not hurt or left upset. This often involves sharing of some kind.
 - Inappropriate response: push the child away, tell him it's mine and he can't have
 it. An "incorrect" includes responses that do not solve the situation favorably or
 at all. That is, the child who wants to play is left crying, hurt, or neglected.

Gives two appropriate responses (2)	Gives one appropriate response (1)	Gives only inappropriate responses (0)	Do not response (-)

S. no. 20. Cultural Development Activity: National values and norms (national anthem)

Materials: Recording of the national anthem

Procedure and Instruction:

 Play the recorded national anthem and ask the child to show you what he/she usually does when hearing the song.

I am going to play one song. I am going to observe what you do, so please show me what you usually do.

- Score according to child's performance.

Response	Stand up (and sing along) (2)	Sing along without standing (1)	Do not response (-)
National Anthem			

S. no. 21. Cultural Development Activity: Festival

Materials: None

Procedure and Instruction:

 Ask the child his/her favorite festivals celebrated in his/her home or neighborhood/ community? Do not probe or give hints when the child cannot elaborate.

What are your favorite festivals celebrated at home or neighborhood/community? How do you celebrate it?

- Score according to the child's performance.
 - Festivals include but are not limited to national festivals, local festivals, family events (e.g., Marriage and birthday).
 - Elaboration of how to celebrate the festival include but not limited to eating special food, wearing special clothes, visiting special places, and dancing.
 - Whether the answer seems to correctly reflect the usual way of celebration does not matter as far as the child can elaborate how to celebrate it.

Elaborate how to celebrate (2)	Tell the favorite festival but do not elaborate (1)	Give an inappropriate answer (mentions something which is not a festival) (0)	Do not response (-)

ECED center background questionnaire - 2080

1) Name of enumerator:

2) Date:

		1. Target ECED Center/School¹ Basic Information	
B11.	Province	01 = Koshi	
		02 = Madhes	
		03 = Bagmati	
		04 = Gandaki	
		05 = Lumbini	
		06 = Karnali	
		07 = Sudur Paschim	
B12.	District		
BI3.	Name of (mother) school		
B14.	School code of (mother) school	(epoo)	
BI5.	Type of ECED center	01 = Attached to the mother school	lf 01, skip BI6
		02 = Not attached to the mother school	
B16.	Name of ECED center		

The definition of the target ECED Center/School: the ECED Center/School that the majority of assessed children (in grade 1 in academic year 2080) attended

BI7.	School type		01 = Community	01 = Community (public) school/center 02 = Institutional (private) school/center	enter enter			
			98 = Other (specify)	(fy)				
	Center Operation	Center Operation Timing (In a year)	months a year	ar				
			days a week					
			From (Morning) .	From (Morning) to (Afternoon))			
	School head teac	School head teachers/principal has	00 = No					
	completed training or orientation on ECED	ig or orientation	01 = Yes					
BI10.	School management committee	nent committee	00 = No					
	(SMC) has received training or orientation on ECED	ed training or ED	01 = Yes					
BI11.	ECED class structure	ture						
	BI12 A. How	BI12 B. What	BI12 C. What	BI12 D. How	BI12 E. How	BI12 F. How many	BI12 G. Estimated	
	many ECED	was the type of	was the main	many children	many teachers	caretakers (aayas)	number of children	
	classes did the	ECED class?	age group	were enrolled	did the ECED	did the ECED class	with disabilities in	
	school/center		of the ECED	in the ECED	class have?	have? (For each	the class. (For each	
	have in the	(For each class	class?	class?	(For each class	class indicated)	class indicated)	
	academic year	indicated)			indicated)			
	2079?		(For each class	(For each				
			indicated)	class				
				indicated)				

01 = Playgroup (PG)	02 = Nursery	03 = LKG	04 = UKG	05 = Sishu	kaksha (infant	class)	06 = Pre-primary	class	07 = Bal bikas	kendra (ECED	center)	98 = Others	(Please specify)

Totacher's Birth Gender (Note: in Nepali calendar) 01 = Male	T13. Disability status Do you identify yourself as a person with a disability? 00 = No 01 = Yes	2. ECED T14. Working Perteachers (Note: Round off T14 A. Total period	Period as ECED off in years) Tl4 B. At the current ECED center	2. ECED Teachers' Information (in the target ECED class²) Irking Period as ECED Stound off in years) Total Tot	TIG. Pre-service training (training career as an ECED teacher) TIG A. Did you receive pre- service training in ECED for 30 days or more? 00 = No (skip 115 B) 02 = PRIVA	TIG. Pre-service training (training before starting career as an ECED teacher) TIG A. Did you TIG B. Provider of pre-service receive pre-service training in ECED for 30 days or more? 00 = No (skip
	} -			03 = Grade 10 04 = Grade 12 05 = Bachelor's degree in education (skip T16) 06 = Bachelor's degree in non-education 07 = Master's degree in education (skip T16) 08 = Master's degree in noneducation 98 = Others (please specify)	01 = Yes	03 = ECED Related NGO 04 = Private Institution C 05 = University (specify from the following list) 05 a = A University 05 b = B University, 05 c = C University

Definition of the target ECED class: the ECED classroom that the majority of assessed children (in grade 1 in academic year 2080) attended in the academic year 2079 The Names of institutions have been anonymized in analysis and reporting.

1			Continued		F City
TI7. In-service training (training after starting the ECED	ne ECED teacher career)	эөг)	TI8 . Continuous supervision or support (visit and provide feedback) in the last year (2079)	TI8 . Continuous supervision or support (visit classroom and provide feedback) in the last year (2079)	T19. Training to address the needs of children with moderate to severe
TI7 B. Provider (For each training)⁴	TI7 C. Year of training (For each training) (Note: In Nepali calendar)	TI7 D. Duration of training in days (For each training)	Tis A. How many supervision or support visits did you receive in the last year (2079)?	TI8 B. Provider	additional needs/ disabilities
01 = PRIVATE INSTITUTION A 02 = PRIVATE INSTITUTION B 03 = ECED Related NGO 04 = Private Institution C 05 = University (specify from the following list) 05 a = A University 05 b = B University 05 c = C University 06=Local government/				01 = Local Government 02 = Provincial Resource Center 03 = NGO/INGO 04 = Private institution (please specify) 98 = Others (please specify)	00 = No 01 = Yes

The Names of Institutions have been anonymized in while doing the analysis and reporting.

	4. Characte	eristics of the target class	
TC1 A.	What was the primary	01 = Nepali	
	language of instruction in class in the last school year (2079)?	02 = English	
		03 = Maithili	
		04 = Bhojpuri	
		05 = Tharu	
		06 = Tamang	
		07 = Magar	
		08 = Newari	
		09 = Bajjika	
		10 = Dotyali	
		98 = Other,	
		Specify	
TC1 B.	What was the secondary	00 = None	
	language of instruction in class in the last school year (2079)?	01 = Nepali	
	, , , , , , , , , , , , , , , , , , , ,	02 = English	
		03 = Maithili	
		04 = Bhojpuri	
		05 = Tharu	
		06 = Tamang	
		07 = Magar	
		08 = Newari	
		09 = Bajjika	
		10 = Dotyali	
		98 = Other,	
		Specify	
TC2.	Was the ECED class operated	00 = No	If 00, skip
	with other classes in the last school year (2079)?	01 = Yes	TC2 B.
TC2 B.	With which grades or classes	01 = With Grade 1	
	was the ECED class operated	02 = With other ECED classes, such as	
	in the last school year (2079)?	nursery or playgroups for younger children	
		98 = Other	
		Specify	

TC3.	Did the ECED facility have a playground outside available for all children?	00 = No 01 = Yes
TC4.	Did the ECED class have sufficient space for <i>all</i> children (2 square meter space per child) inside the room in the last school year (2079)?	00 = No 01 = Yes
TC5.	Did the ECED class have chairs/bench and table/desks of appropriate size for children in the last school year (2079)?	00 = No 01 = Yes, but insufficient number 02 = Yes, and sufficient number for all children
TC6 A.	Did the ECED class have a learning area for reading with relevant children's books in the last school year (2079)?	00 = No 01 = Yes but insufficient (less than 10 items) 02 = Yes and sufficient (10 or more items)
TC6 B.	Did the ECED class have a learning area for mathematics with relevant learning/play materials (number board, counting chart, abacus, etc.) in the last school year (2079)?	00 = No 01 = Yes but insufficient (less than 10 items) 02 = Yes and sufficient (10 or more items)
TC6 C.	Did the ECED class have a learning area for role play with relevant learning/play materials (dolls, puppets, animal sets) in the last school year (2079)?	00 = No 01 = Yes but insufficient (less than 10 items) 02 = Yes and sufficient (10 or more items)
TC6 D.	Did the ECED class have a learning area for science with relevant learning/play materials (plants, colorful objects, animal sets) in the last school year (2079)?	00 = No 01 = Yes but insufficient (less than 10 items) 02 = Yes and sufficient (10 or more items)
TC6 E.	Did the ECED class have a learning area for creativity with relevant learning/play materials (music instruments, crayons, pictures) in the last school year (2079)?	00 = No 01 = Yes but insufficient (less than 10 items) 02 = Yes and sufficient (10 or more items)
TC6 F.	Did the ECED class have a learning area for construction with puzzles and building blocks in the last school year (2079)?	00 = No 01 = Yes but insufficient (less than 10 items) 02 = Yes and sufficient (10 or more items)

		T	1
TC6 G.	Did the ECED class have other	00 = No	If 00, skip
	learning areas (specify) in the last school year (2079)?	01 = Yes but insufficient (less than 10 items)	TC6 H.
		02 = Yes and sufficient (10 or more items)	If 01 or 02, specify the
		Specify the area(s)	area
TC7.	Did the ECED class have a	00 = No	If 00, skip
	curriculum in the last school year (2079)?	01 = Yes	TC7 B and TC7 C.
TC7 B.	Was it the national ECED	01 = Yes	
	curriculum?	98 = Others (Specify)	
TC7 C.	How did you use the	00 = Not using it for any purposes	
	curriculum in the last school year (2079)?	01 = Using it to plan classroom activities	
	(multiple options)	02 = Using it to reach learning and	
	(manapie optione)	development objectives	
		98 = Others (Specify)	
TC8.	Did the ECED class have the Early Learning and	00 = No	If 00, skip TC8 B.
	Development Standards in the last school year (2079)?	01= Yes	ТСо Б.
TC8 B.	How did you use the ELDS in	00 = Not using it for any purposes	
	the last school year (2079)?	01 = Using it with report cards (assessing	
	(multiple options)	each child's developmental status and	
		share it with parents)	
		02 = Using it to plan classroom activities	
TC9.		98 = Others (Specify)	
169.	How much homework did you give your students in the last	00 = No homework given at all	
	school year (2079)?	01 = A couple of times a week	
		02 = Daily	
T00 D	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	98 = Others (Specify)	
TC9 B.	What kind of homework did you give?	01 = Handwriting	
	, ,	02 =Memorizing various letters, words and numbers	
		03 = Various construction work	
		04 = Project work	
		05 = Story reading by parents	
		98= Others (Specify)	

TC10.	Did the ECED class maintain a portfolio/record for individual	00 = No 01 = Yes	
	children in the last school year (2079)?	OT = Yes	
TC11.	Did the ECED class have a first	00 = No	
	aid box for basic treatment for injury/accident in the last school year (2079)?	01 = Yes	
TC12.	Did the ECED facility provide	00 = No	
	safe water for drinking in the last school year (2079)?	01 = Yes	
TC13.	Did the ECED facility have	00 = No	If 00, skip
	toilets in the last school year (2079)?	01 = Yes	TC12 B and TC12 C
TC13 B.	Were the toilets available for	00 = No	
	boys and girls separately in the last school year (2079)?	01 = Yes	
TC13 C.	Were the toilets child-friendly	00 = No	
	(i.e., smaller size) in the last school year (2079)?	01 = Yes	
TC14.	Was lunch provided at the	00 = No	
	ECED facility in the last school year (2079)?	01 = Yes. Provided by the facility free of charge	
		02 = Yes. Provided by the facility with charge to families	
		03 = Yes. Brought from home	
TC15.	Were snacks provided at the	00 = No	
	ECED facility in the last school year (2079)?	01 = Yes. Provided by the facility free of charge	
		02 = Yes. Provided by the facility with charge to families	
		03 = Yes. Brought from home	
TC16.	Did the ECED class use any	00 = No	
	textbooks or workbooks in the last school year (2079)?	01 = All in One	
	1000 0011001 your (2070):	98 = Others (Specify)	
TC17 A.	How often did the ECED class	00 = Not at all,	
	receive support from the SMC for providing resources, such	01 = Occasionally (a few times a year)	
	as learning and play materials	02 = Monthly (every month)	
	and funds in the last school year (2079)?	03 = Weekly (every week)	
	,	04 = Daily (every day or almost every day)	

TC17 B.	How often did the ECED class	00 = Not at all,	
	receive supervision visits from SMC in the last school year	01 = Occasionally (a few times a year)	
	(2079)?	02 = Monthly (every month)	
		03 = Weekly (every week)	
		04 = Daily (every day or almost every day)	
TC17 C.	How often did the ECED class	00 =	(skip if BI12
	receive support from the SMC for addressing needs of	Not at all,	G= 0)
	children with disabilities in the	01 = Occasionally (a few times a year)	
	last school year (2079)?	02 = Monthly (every month)	
		03 = Weekly (every week)	
		04 = Daily (every day or almost every day)	
TC18 A.	TC18 A. How often did the ECED class receive parents' support for school meals in the last school year (2079)?	00 = Not at all,	
		01 = Occasionally (a few times a year)	
		02 = Monthly (every month)	
		03 = Weekly (every week)	
		04 = Daily (every day or almost every day)	
TC18 B.	How often did parents	00 = Not at all,	
	engage in classroom activities (storytelling, sharing local	01 = Occasionally (a few times a year)	
	knowledge, etc.) in the last	02 = Monthly (every month)	
	school year (2079)?	03 = Weekly (every week)	
		04 = Daily (every day or almost every day)	
TC18 C.	How often did the ECED class	00 = Not at all,	
	receive parents' support in providing learning materials	01 = Occasionally (a few times a year)	
	(stationery, local resources,	02 = Monthly (every month)	
	etc.) in the last school year	03 = Weekly (every week)	
	(2079)?	04 = Daily (every day or almost every day)	

ANNEX 3: Cut score and their definitions

5 YEARS (60- 72 months)	Minimally Progressing	Minimally on track		
Physical	They are able to balance the whole body on one leg stand and hop with one leg more than once properly in the same spot. They can connect dots to complete a given picture but lines are not straight or lines are not connected to the vertices. They can throw and catch a small object at least once with proper direction, and can demonstrate partially functional sensing (distinguish between high and low tones).	They are able to balance their whole body on one leg and hop with one leg at least 5 times. They can connect dots to complete a given picture with straight lines but lines may not be connected to the vertices. They can throw and catch a small object all three times but from different directions, and can demonstrate fully functional sensing (distinguish between low and high tones)		
Cognitive	They should be able to recognize 1-2 single-digit numbers, identify 3 colors and some basic shapes (e.g., square, circle, triangle, stars). They can solve a simple puzzle of 2-3 pieces promptly, draw 2-3 pictures from imagination, and make patterns.	They should be able to recognize all single-digit numbers, identify 5 colors and many basic shapes (e.g., square, circle, triangle, stars). They can classify in one way only. They can solve a simple puzzle of 4 pieces, demonstrate knowledge about objects" use, draw 4-5 pictures from imagination, know about days, and make patterns.		
Language	They can identify basic vocabulary of common objects and 1 initial letter sound. They should be able to partially comprehend simple stories and recall some information from stories. They are able to copy 1 pre-writing shape.	They can identify vocabulary of common objects and 1-2 initial letter sounds. They should be able to fully comprehend simple stories and recall simple information from stories. They are able to copy 2-3 prewriting shapes.		
SE + Cultural	They greet familiar adults or peers with some hesitation, they can recognize a few emotions but are not able to express them properly and can name festivals but not elaborate. Can only say limited names of either friends or family with confidence. Can recognize the national anthem but not respond appropriately.	Children can interact with familiar peers and adults they recognize without hesitation. Can recognize and attempt to respond to emotions shown in a picture. Can name a few friends and family members with confidence. Can name festivals without elaborating and sing along with the national anthem but without responding appropriately.		

ANNEX 4: Panelists attending the cut score development workshop

Panelist	Organization	Role	
Dipu Shakya	UNICEF	ECD Specialist	
Elli-Noora Heino	UNICEF	Education Officer (ECED)	
Rubina Chhusyabaga	Independent	Assessor	
Surya Kumari Waiba	Laligurans National Academy	Teacher-ECD	
Samiksha Bhatta	Shree Gram Sudhar Basic school	Teacher-ECD	
Lali Rana	Kovida Education Center	Assessor	
Prakash Neupane	Progress Inc.	Enumerator Supervisor	
Anusha Ghimire	Independent	Assessor	
Meenakshi Dahal	Independent	ECD expert	
Nabina	Fluorescent Higher Secondary School	Pre-primary Coordinator	
Shyam Prasad Acharya	Education Review Office	Officer	
Renuka Adhikari	Education Review Office	Section Officer	
Nirmala Shrestha	Shree Mahindra Basic School	Teacher-ECD	
Sunita Baral	Education Review Office	Section Officer	
Leena Shrestha	ECETA	Vice Chair	
Sunita Regmi	Khagendra School	Teacher-ECD	
Shashi Bc	Setogurans NCDS	Director	



Government of Nepal
Ministry of Education, Science and Technology

Education Review Office

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