Baseline (Curriculum Implementation Review) Survey Report

February 2025

Nepal
The Project for the Improvement of Basic School Education (IBSE)

The Survey was led by The Project for the Improvement of Basic School Education (IBSE) in collaboration with Ministry of Education, Science and Technology, Curriculum Development Centre to assess the implementation of the Integrated Curriculum (IC). Based on this survey, the IBSE team will develop an intervention strategy to support teacher professional development (TPD) and enhance students' mathematical abilities. The results of this survey serve as the foundation for future interventions, curriculum revision, and teacher training strategies to improve learning outcomes in primary schools.

List of Abbreviations

ADB	Asian Development Bank
ASIP	Annual Strategic Implementation Plan
AWPB	Annual Work Plan and Budget
CDC	Curriculum Development Centre
CEHRD	Centre for Education and Human Resource Development
C/P	Counter Part
DLIs	Disbursement Linked Indicators
DP	Development Partner
EDCU	Education Development and Coordination Unit
ERO	Education Review Office
ETC	Educational Training Centre
FY	Fiscal Year
GoN	Government of Nepal
HT	Head Teacher
IBSE	Project for the Improvement of Basic School Education
IC	Integrated Curriculum
ICT	Information and Communication Technology
IDCJ	International Development Center of Japan
JCC	Joint Coordinating Committee
JICA	Japan International Cooperation Agency
LEU	Local Education Unit
LG	Local Government
LMS	Learning Management System
IMEN	Improving Mathematics Education in Nepal
MEXT	Ministry of Education, Culture, Sports, Science and Technology
MoEST	Ministry of Education, Science and Technology
NARN	National Assessment of Reading and Numeracy
NASA	National Assessment for Student Achievement
NCF	National Curriculum Framework
ETC	Education Training Centre
PG	Provincial Government
RE	Roster Expert
ETC-RT	ETC Roster Trainer
R/D	Record of Discussion
RT	Roster Teacher
RP	Resource Person
SESP	School Education Sector Plan
SLM	Self-Learning Material
SIP	School Improvement Plan
SMC	School Management Committee
TG	Teacher's Guide
TPD	Teacher Professional Development
TTT	Technical Taskforce Team
USAID	United States Agency for International Development
WB	World Bank

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Executive Summary

1. Introduction

The Baseline Survey for the Improvement of Basic School Education (IBSE) Project in Nepal, as a technical cooperation initiative, aims to improve students' mathematical abilities by properly using CDC's official workbook, which was developed by CDC with technical support from the JICA-supported previous IMEN project. Additionally, it plans to develop and implement teacher support measures at the school and local government (LG) levels to ensure that teachers can effectively use the workbooks and address students' individual learning needs.

IBSE conducted a baseline survey to assess the current status of primary education and the implementation of the Integrated Curriculum (IC). Based on this survey, the IBSE team will develop an intervention strategy to support teacher professional development (TPD) and enhance students' mathematical abilities. The results of this survey serve as the foundation for future interventions, curriculum revision, and teacher training strategies to improve learning outcomes in primary schools.

2. Survey Framework

The survey was conducted in seven districts: Kanchanpur, Dailekh, Kapilvastu, Syangja, Dhading, Saptari, and Sankhuwasabaha. The methodology involved reviewing existing materials, administering questionnaires to teachers, students, head teachers, and education officials, conducting mathematics academic tests, interviewing teachers, and observing lessons to assess teaching methods and student engagement.

A total of 1,527 students, 186 teachers, and 82 head teachers participated in the survey. Schools from 82 Local Governments (LGs) were selected for assessment. Additionally, seven Education Training Centers (ETCs), seven Education Development and Coordination Units (EDCUs), and 82 Local Education Units (LEUs) were involved in the study.

3. Key Findings and Indications for IBSE Intervention

3.1 Factors Affecting Student Test Scores and Actual Status in Classroom

Use of CDC workbook

- While it was confirmed that most students possessed the workbook (WB), teachers do not properly use WB exercises and instead select or create new worksheets.
- The ratio of owning the WB has not been statistically confirmed.[1]
- WB is designed to support effective mathematics learning for students. Therefore, teachers need to conduct lessons in alignment with the WB.

[1] Errors were identified in students' responses using the English version of the CDC workbook in Syangja. Therefore, Syangja's response is incorrect. Estimates are that about 86% of students have CDC workbooks. Therefore, multiple regression analysis's "S10 Workbook" coefficient is incorrect. Excluding the Syangja data, the regression analysis shows that the Workbook utilization coefficient is insignificant.

Students doing homework

- Teachers assigned homework. However, it was observed that teachers usually tend to focus only on whether the homework was correct or incorrect when checking it.
- The study found a correlation between students doing homework and the support they receive at home, as well as their test scores. However, findings from lesson observations raise concerns regarding the effectiveness of homework for students who struggle to comprehend the content during class.
- Strategies for students who do not understand how to solve problems are needed.

Student's mother language

- It was observed that students' mother tongue has minimal impact on test scores in mathematics.
- Lesson observations revealed that both Nepali- and Maithili-speaking students struggled with word problems, suggesting that limited word recognition (reading skill) in the Workbook hinders maths comprehension.

Teacher training and their knowledge

- Both trained and untrained teachers used the workbook not properly, with no consideration for students' mathematical concept development.
- A significant correlation was found between teacher participation in TPD training and student test scores (There are many opinions from teachers that the frequency of training should be increased).
- IBSE should focus on expanding TPD training and promoting standardized workbook-based teaching practices.

Teacher's response to individual students

- Teachers tried to support individual students but tended to focus more on students who completed the problems, with limited support for those who struggled.
- Statistically, the effectiveness of teachers responding to each student was confirmed negatively.
- Lesson observations revealed a teacher's concern for high-achieving students.
- IBSE should support teachers in addressing students who cannot solve their problems.

3.2 Status and Feasibility of Implementing TPD at the LG Level

LG's Education plan

- Education development (26%)[2] was identified as a top policy priority at the LG level, alongside social development (26%) (Further study is needed to clarify the budget allocation

[2] The percentages indicate the proportion of the total number of LGs covered. Education development (26%) means that 26% of LGs give education development top priority.

to education development in the LG).

- In Dhading and Saptari, one-third of LGs (34%) ranked education development as their highest priority.
- In Kanchanpur, 78% of LGs reported having a specific education development plan. In contrast, no LGs in Syangja had formulated such a plan (0%) (Further study is needed to clarify the reasons for it).
- 30% of LGs prioritized "improving early-grade education" as the most critical policy within their LG education plans.

TPD training in LG

- Last school year, 63% of LGs conducted at least one batch of five-day customized training (After this, some teachers informally shared their knowledge with colleagues, but schools did not conduct a formal information sharing meeting with teachers).
- Across all surveyed districts, a total of 2,226 participants attended these training sessions. This translates to nearly 30 teachers trained per LG on average.
- For the current school year, 44% of LGs plan to conduct one batch/group of training, while 26% intend to hold two batches/groups of training.

Roster Expert (RE)/Resource Person (RP) in LG

- One-third (33%) of LGs had assigned REs. Additionally, about 20% of LGs had independently appointed school supervisors similar to REs, separate from those designated by the Ministry of Education, Science and Technology (MoEST).
- However, field observations indicated a limited presence of REs.
- Only 18% of LGs had secured a budget for RE deployment, indicating that the majority lack dedicated funding for this purpose.
- Regarding school visits for TPD conducted by REs, Resource Persons, and LEUs last year, the combined proportion of responses indicating "no information" or "zero visits" reached 73% [2-5-1 (25)].

3.3 Gender

- The ratio of girls to boys in the sample students is 52% to 48%.
- The average test score of girls (G4) is lower than that of boys, which is statistically significant.
- The ratio of females to males in the sample of teachers is also 52% to 48%.
- The ratio of females to males in the sample head teacher is 9% to 90% (and 1% of others).
- The ratio of females to males in the sample LEU officers is 22% to 78%.
- 89% of the target LEU officers reported that they consider the gender gap when selecting participants for TPD training.
- 76% of the target LEU officers reported that the LG’s plan for improving students' learning addresses gender issues.

3.4 Strengths and Weaknesses of Online Mode of Certification TPD Training on IC

Strengths

- Saving travel time: Attend from home/workplace, reducing travel burden.
- Cost reduction: No travel, per diem, or accommodation costs.
- Flexible schedule: Training in early morning (6:00-10:00 am) or evening (4:00-8:00 pm).
- Flexible location: Join from anywhere with internet access.
- IT skill improvement: Learn tools like Zoom and acquire technical skills.

Weaknesses

- Technical challenges: Unstable internet, power cuts, device limitations, and poor connectivity in remote areas.
- Low IT literacy: Difficulty using Zoom (e.g., breakroom), both for participants and trainers.
- Limited interaction: Less engagement with trainers and peers, fewer opportunities for Q&A.
- Motivation issues: Hard to stay focused; some multitask during training.
- Limited feedback: Delayed or insufficient individualized responses.
- Practical training limitations: Difficult to conduct hands-on skill training online.

4. Future Directions for Improvements

To effectively implement IC in schools, it is essential to enhance teachers' understanding and teaching skills through training courses. Introducing IC to Grades 1-3 students is crucial, as these early-grade learners particularly benefit from child-centered education. Additionally, revising the current IC should consider both vertical and horizontal connectivity among subjects.[3] Currently, many schools struggle to synchronize themes across subjects, leading to inconsistencies in learning, such as students studying "Me and My Family" in Nepali while learning "My School" in Hamro Serofero. Properly structuring a "weekly timetable" and "annual lesson plans" is vital, as IC aims to integrate four subjects under a common theme to enhance real-life applicability.

For improvement of early grade math learning

The challenge for improving math learning is to encourage more effective use of the workbook by both teachers and students. For example, while mathematics student workbooks employ color-coded learning activities to differentiate teaching methods, this innovation is neither clearly explained in the teacher guide nor clearly explained in the student's workbook. To enhance learning, such crucial information should be presented in both resources. Furthermore, IBSE must disseminate this information to all teachers working with MoEST, EDCU and LEU. Here, it is essential not only to provide teachers with this information, but also to provide technical assistance related to lesson design and its implementation in a classroom.

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[3] For example, in Kancahnpur, surveyed schools have no grade teaching. All schools applying for the subject teaching. Sufficient teacher grade teaching is not possible in these schools. In current practice, there is no regular communication with each other. Sometimes, teachers personally or in staff meetings, and different types of in-school meetings, each subject teacher communicates with the other. So, they need some training in effective communication.

The core of the approach will be a more detailed understanding of the actual conditions of technical meetings and teacher assemblies at school. It will be centered on ensuring active learning time through the use of WB and TG; and strengthening teachers' learning support. To this end, it is essential to identify existing learning opportunities for teachers and establish a system that can be integrated into the regular school routine without increasing their workload. Additionally, while fostering an environment where teachers can work seamlessly, a monitoring mechanism involving headteachers and other staff should be considered, aiming to create a sustainable support system.

Involving lesson design, another crucial aspect is for teachers to properly understand students' learning processes. As revealed by the survey's classroom observations, Nepali G1-3 teachers must shift from a one-sided teaching style where they dominate the class discussion and students merely follow instructions. Teachers will need to work more daily to create a class structure and practice that allocates time for teacher explanations, time for students to tackle practice problems, and time for students to share ideas with one another based on the workbook, while the IBSE will support this initiative.

Chapter I. Background of the Survey

Nepal has its own practice of the curriculum development for the school education. The recent National Curriculum Framework for School Education (NCF) 2019, aims to integrate subjects, and foster developing the soft skills especially at the Basic (G1-3) level. As per the provisions of the NCF 2019, the curriculum of Grades 1-3 was developed in accordance with the integrated approach. While the concept of an integrated curriculum was not entirely new, its systematic implementation in Nepal is a recent development, requiring clarity among education stakeholders regarding its principles. The curriculum of Grade 1 was piloted in 103 community schools in 2019, and based on the results obtained from the tests, it was implemented in all schools in Nepal from the academic year 2020. Despite the negative consequences of the COVID-19 pandemic, the Curriculum Development Centre (CDC) has developed the teaching and learning materials (TLM) for the G2 & G3, which were tested in 2020 and nationwide implemented from 2021. As part of the new curriculum dissemination, a series of orientation programs from the federal, provincial, district, and local government (LG) levels were conducted in a cascade approach.

The present integrated curriculum for basic grades (1-3) in Nepal is based on multidisciplinary and interdisciplinary design. Based on interdisciplinary and multidisciplinary subject areas, the structure of the curriculum has been prepared according to the integrated headteachers; and soft skills have also been integrated. The IC has only three learning domains: language, Hamro Serofero and mathematics. The language domain includes three languages, Nepali, English and the mother tongue which can also be as the subject of local content. The learning domain 'Hamro Serofero' consists of the many subjects of the previous curriculum: social studies and creative arts, science, health and physical education. Meanwhile, Mathematics remains a separate discipline. The behavioral skills/soft skills required for Grades 1-3 students have been integrated into all subject areas and grades as needed.

Curriculum is a crucial aspect of ensuring a quality education, therefore, its periodic and continuous review is necessary for its effectiveness in achieving the intended outcomes. As a part of curriculum status review, CDC has recently conducted the "Evaluation of the Effectiveness of Integrated Curriculum" (published in July 2024). This survey clarified the overall situation regarding the implementation of the IC and reported that although there were issues such as the need to strengthen teachers' teaching skills further and to provide consistent instruction across all three grades, the number of students who have a positive attitude toward school and who enjoy learning has increased.

Ministry of Education, Science and Technology (MoEST), with the technical assistance of Japan International Cooperation Agency (JICA), implemented "Project for Improving the Quality of School Education in Nepal - Improving Mathematics Education in Nepal (IMEN)" from January 2019 to December 2023. Following the integrated approach, CDC with support from IMEN, has developed Student's Workbook, Teacher's Guide (TG), and Students' Self-learning Materials for G1-3 in IC. There is provision to use the TLM developed by CDC in all community schools throughout the country.

However, to maximize the benefits, both MoEST and JICA felt the need for further facilitation to the various stakeholders (especially LGs and schools) on how to use newly developed TLM effectively and adequately. In this context, MoEST with technical support from JICA has commenced a 5-year project entitled “The Project for the Improvement of Basic School Education (IBSE)” in Nepal that aims to improve the early grade mathematics outcomes through implementation of Teachers Professional Development (TPD) activities. While the primary objective of IBSE is focused on mathematics, Output 1 and 2 are going to be carried out within the framework of the new curriculum of Grades 1 to 3 that is formulated in an integrated approach.

In order to analyze the actual teaching and learning practices in the actual classroom and then identify the bottleneck to promote the students’ active learning, IBSE starts with a field survey (Baseline Survey). The survey under IBSE is composed of two parts; Part 1 is the collection and analysis of basic data as part of the project's baseline survey, and Part 2 is the analysis of the implementation status of all thematic subject areas under the context of IC. The Part 1 survey includes an academic test of G3 mathematics for students to verify the achievement of IBSE’s objective mentioned above. This academic test will also be conducted during the mid-line and end-line surveys. As agreed by MoEST and JICA in October 2024, the Part 2 survey (curriculum implementation review survey) is conducted by involving three Nepali National Experts for thematic subject areas other than mathematics as a member of the Technical Taskforce Team. The results of the survey will be shared within MoEST and the relevant organizations as a resource for the improvement of teacher professional development by the CEHRD and for a revision of the current curriculum by CDC.

Chapter II. Introduction

2.1 Objective of the Survey

2.1.1 Structure of this Survey

When the project was being formulated, the Ministry of Education, Science and Technology (MoEST) and JICA held a series of discussions. As a result, it was concluded that to support teacher professional development (TPD) technically to improve the capacity of the basic school (G1-3) teachers in Nepal. For that, it is essential to understand the Integrated Curriculum (IC) implementation status in lower grades of Basic education (Grades 1 to 3). Therefore, this survey, 'Curriculum Implementation Review Survey', is to be conducted as a "Baseline Survey" at the beginning of the project. The survey under the project has two Parts; Part 1 is mainly focused on collecting and analyzing the basic information as a part of the project baseline survey for measuring/verifying the project goal, "Mathematics learning outcomes at the basic level are improved," and Part 2 covers the review of the curriculum implementation status of all four subjects of G1-3 under IC.

2.1.2 Objectives of the Survey

The objectives of the survey are as follows:

1) Review the current curriculum, teaching & learning materials (student's workbook, teacher's guide and self-learning materials, etc.) developed by CDC and classroom implementation.
2) Identify good practices and challenges of integrated curriculum implementation by analyzing the data obtained from the survey and
3) Make recommendations for effective implementation of the IC
4) Examine the intervention methods and implementation strategies for Output 3 based on the results of the analysis.

The CDC is expected to utilize the results of the survey for the revisions of the G1-3 curriculum in the future and CEHRD will further enhance the ongoing TPD activities under the revised Teacher Professional Development Framework, 2080. Furthermore, as the figure below shows, this survey (as a Baseline Survey) will be followed by the Midline and Endline Surveys.

Table 2-1 Overall Survey Design

Baseline Survey	Midline Survey	Endline Survey
Sep. 2024 - Oct. 2024 (Part 1) Dec. 2024 - Jan. 2025 (Part 2)	April 2026 (Conducting only the Part 1 survey part)	April 2028 (Conducting only the Part 1 survey part)
Assessing the current situation for formulating interventions	Effectiveness Measurement (Preliminary)	Effectiveness measurement (after the fact)

2.1.3 Limitations of the Survey

In line with the objectives of the survey, the implementation status of the IC was reviewed. This survey primarily involves collecting and analyzing primary data and serves as a valuable resource regarding the current status of the implementation of the basic education curriculum (G1-3) in Nepal. The survey

focuses solely on three main questions:

- What are the factors related to students' academic improvement?
- What are the future prospects for teacher training at the LG level?
- What is the status of students, teachers, and others regarding gender and ethnicity/caste, which is a key focus of this project?

The following are the main limitations of this survey.

- This survey primarily focuses on the implementation status of the Integrated Curriculum (IC) and is designed to complement the recent study titled "Evaluation of the Effectiveness of Integrated Curriculum," published by CDC in July 2024. Therefore, international practices of IC are not included in the scope of this survey.
- To verify the achievement of IBSE's aforementioned objective, this survey focuses solely on the academic test of G1 - G3 mathematics content, which will also be administered during the mid-line and end-line surveys. The academic tests for the other three subjects - Mero Nepali, My English, and Harmo Serofero - were not included.
- Since the project started in June 2024, this survey was conducted in September/October 2024 (4 months after the academic year starts) and so administered a mathematics academic test to 4th-grade students, focusing on content up to the 3rd grade. In order to find out the actual learning performance (mathematics test), the surveys subsequent to this survey will be conducted in April 2026 for the midline survey and in April 2028 for the endline survey.
- A few errors were identified and noticed (especially the use of the CDC workbook and the inconsistency between the student's responses and the teacher's responses, which were not carefully checked by the surveyors at the time of the survey). However, since it is not ethically correct to revise the data entered in a statistical survey, we leave it as it is. Such types of errors will be avoided in the upcoming survey under the project.
- Future readers are expected to conduct further analyses based on their specific interests, which will lead to discussions that contribute to future policy development.

2.2 Framework of the Survey

2.2.1 Areas Covered by Survey

One district is selected from each province, as shown in the map below. A total of 7 districts (Kanchanpur, Dailekh, Kapilvastu, Syangja, Dhading, Saptari and Sankhuwasabha). These seven districts were selected as a result of project formulation discussions between MoEST and JICA.

The selection of LGs and schools for the survey was thoroughly discussed with the counterpart (CP).

As a result, it was decided that the LEUs in all 82 LGs targeted by this project would be included. On the other hand, since the survey needed to be conducted within a short period, one school was randomly selected from each LG. Therefore, the total number of sampled schools was 82.

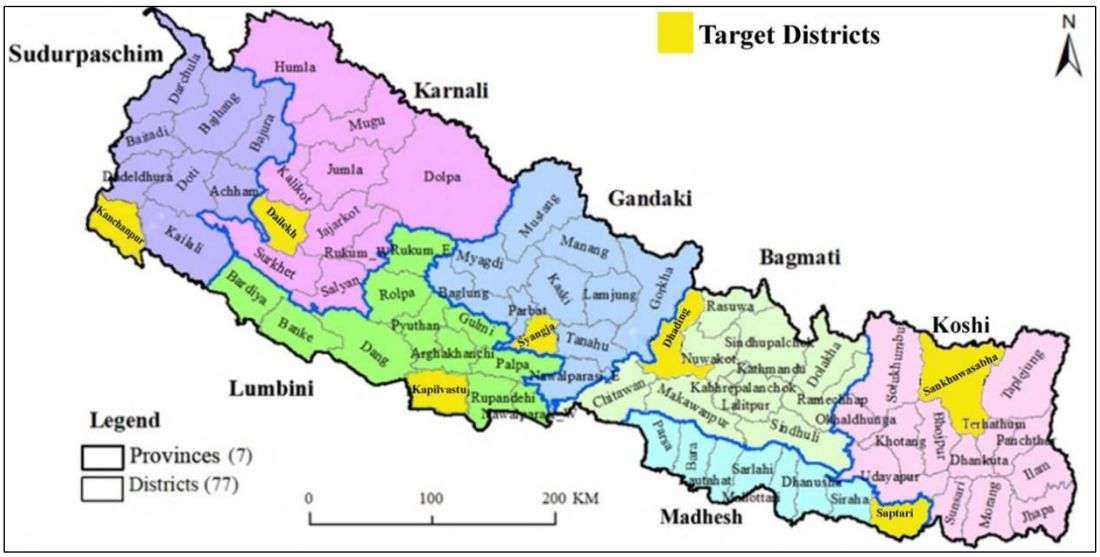


Figure 2-1 Target Districts for Survey

2.2.2 Methodology for Part 1 and Part 2 Surveys

The common survey methods for Part 1 and Part 2 are as follows.

1) Review of existing materials
2) Questionnaires (for ETC, EDCU, LEU, head teachers, teachers and students)
3) An academic test for Grade 4 students (only mathematics)
4) Interview with head teachers and all teachers (Grades 1-3)
5) Lesson observations

This Survey is divided into two periods, Part 1 and Part 2. The following table shows the contents of each survey.

Table 2-2 Part 1 and Part 2 Surveys' Contents

Part 1	- Questionnaires for ETC, EDCU, LEU, head teachers - Questionnaires for teachers and students regarding mathematics - Mathematics lesson observation - A mathematics academic test of Grade1-3 contents for Grade 4 students (based on the test item developed by ERO)
Part 2	- Review of existing materials - Questionnaires for teachers and students regarding Nepali, English and Hamro Serofero (Our Surroundings) - Interview with head teachers and Grade 1-3 Nepali, English and Hamro Serofero (Our Surroundings) teachers (Grades 1-3) - Nepali, English and Hamro Serofero (Our Surroundings) lesson observations

2.2.3 Survey Period

The periods during which Part 1 and Part 2 surveys were conducted are shown in the table below.

Part 1: From September 2024 - October 2024 (mainly by the project team)

Part 2: From December 2024 - January 2025 (together with CDC, including national experts)

2.2.4 Target ETC, EDCU, LEU and Schools

The table below shows the breakdown of the ETCs, EDCUs, LEUs, and schools that were surveyed.

Table 2-3 Target ETC, EDCU, LEU and Schools

ETC		Questionnaire in Part 1	7 ETC (1 ETC in each province)
EDCU		Questionnaire in Part 1	7 EDCU (1 EDCU in each province)
LEU		Questionnaire in Part 1	82 LEU (All LGs of 7 target districts)
School	Head teachers	Questionnaires in Parts 1 and 2	82 head teachers (1 school from each LG)[4]
	All maths teachers (G1-3)	Questionnaires in Part 1	G1-3 all maths teachers from selected schools (1 school selected from each of 82 LGs)
	All Nepali, English and Hamro Serofero (Our Surroundings) teachers (G1-3)	Questionnaire in Part 2	G1-3 all three subject teachers in 14 schools[5] (2 LGs were selected from each of the 7 target districts, and 1 school was selected from each LG)
		Interview in Part 2	G1-3 all three subject teachers in 6 schools in Sankhuwasabha, Syangja and Kanchanpur (2 LGs were selected from each of these districts, and 1 school was selected from each LG)
	Students	Academic tests (Maths only) in Part 1	1 class from each school of 82 schools (All students of G4)
		Maths lesson Observation	Lesson in multiple schools in each district
		Nepali, English and Hamro Serofero (Our Surroundings) lesson Observations	6 lessons (each 2 LGs selected in Sankhuwasabha, Syangja and Kanchanpur, and 1 school selected from each LG)

Part 2 of the survey was led by the CDC and national experts. It focused on the subjects of Nepali, English, and Hamro Serofero (Our Surroundings). However, due to the busy schedule of CDC staff and the requirement to conduct the survey within a very short period, it was decided, in consultation with the CDC, that the surveyors visit and conduct interviews, discussions, and lesson observations in only three out of the seven project target districts. The number of students, teachers, and Head teacher surveyed is shown in the table below.

Table 2-4 Number of Students, Teachers, and Head teacher Surveyed

District	Part 1			Part 2
	Students	Teachers	Head teacher	Teachers

[4] 1 school was randomly selected in each LG. The minimum conditions for the schools to be selected was that the number of students in G4 was at least 10.

[5] These schools were selected from the schools chosen in Part 1, and additionally, the schools that were relatively accessible for National Experts were prioritized.

Dailekh	219	25	11	5
Dhading	224	32	13	2
Kanchanpur	175	26	9	4
Kapilvastu	240	23	10	4
Sankhuwasabaha	182	23	10	5
Saptari	308	37	18	5
Syangja	179	20	11	3
Total	1,527	186	82	28

Note: The number of teachers in Part 2 was determined by selecting 2 LGs from each district, then selecting 1 school from each LG, with the teachers from those schools serving as the sample.

2.3 Survey tools

In Survey Part 1, the district coordinators employed by this project served as surveyors and conducted the survey based on the questionnaire, targeting EDCU, LEU, head teachers, G1-3 maths teachers, and G4 students, including some of the question items from Part 2. For ETC, the project team members and the JICA long-term expert conducted the survey based on the questionnaire. The details are as follows.

Table 2-5 Survey Tools for Part 1 and Part 2 (partially)

Targets	No.	Collected Information	Note
ETC	7	1) Basic information 2) Budget for the training 3) TPD certification training 4) Trainers and trainees 5) Online mode of training	• The corrected data is used in both Parts 1 and 2. Therefore, the Part 2 survey does not need to be researched again.
EDCU	7	1) Basic information 2) Facilities for the teacher training 3) LEU support 4) Teacher trainings 5) Education project	• The corrected data is used in both Parts 1 and 2. Therefore, the Part 2 survey does not need to be researched again.
LEU	82	1) Basic information 2) Priority of LG and educational plan 3) Teacher training 4) Improvement of quality of learning 5) TPD support 6) Education project	• The corrected data is used in both Parts 1 and 2. Therefore, the Part 2 survey does not need to be researched again.
Head Teachers	82	1) Basic information 2) School physical facility 3) Teacher professional development and support 4) School management 5) The number of students by types of disabilities	• The corrected data is used in both Parts 1 and 2. Therefore, the Part 2 survey does not need to be researched again.
Teachers (Teaching Maths)	214	1) Basic information 2) Teacher training 3) Teaching and learning material 4)Teaching learning process and assessment 5) TPD support and guidance 6) Opinions (self-evaluation)	• In the Part 2 survey, the same questionnaire with some revisions was used. For example, the mathematical question parts were replaced by Nepali, English and Hamro Serofero (Our Surroundings).
Students	1,527	Mathematics academic test (20 questions of G1-3 contents) for G4 students	• The academic tests of Nepali, English and Hamro Serofero (Our Surroundings) were not conducted due to time constraints.
		1) Basic information	• The corrected data include four

		2) Socio-economic status 3) Learning materials 4) Learning at home 5) Learning process	subjects (Nepali, English, Mathematics and Hamro Serofero (Our Surroundings)) composed in IC. Therefore, it is not necessary for the part 2 survey to research it again.

Based on the discussion with CDC, the Part 2 survey focuses on questionnaires for teachers (Nepali, English and Hamro Serofero (Our Surroundings)). The questionnaire used in the Part 1 survey was also used for the Part 2 survey. Still, some of the mathematics questions were replaced by questions about the Nepali language, English and Hamro Serofero (Our Surroundings). In addition, the Part 2 survey was conducted with focus group interviews with teachers and lesson observations of Nepali, English and Hamro Serofero (Our Surroundings).

2.4 Survey Schedule and Surveyors

The survey schedule and surveyors are shown in the table below.

Table 2-6 Survey Schedule and Surveyors

	Survey Schedule	Surveyors
Part 1	ETC From October – December 2024	- District Coordinators - Project team members - JICA long-term expert
	EDCU/LEU/School From September – October 2024 in Dailekh, Dhading, Kanchanpur, Kapilvastu and Syangja From September – November 2024 in Sankhuwasabha and Saptari	- District Coordinators - Project team members - JICA long-term expert - CEHRD and CDC officers
Part 2	Teacher Questionnaires From December 2024 – January 2025 in 7 districts (2 LG from each district)	- District Coordinators
	Teacher Interview and Lesson Observation From December 2024 – January 2025 in Sankhuwasabha, Syangja and Kanchanpur (2 schools from each district)	- CDC and CEHRD officers - National experts - Project team members - JICA long-term expert

Chapter III. Major Findings

This report, which involves collecting and analyzing vast amounts of data, serves as a valuable resource on the current state of Basic Education (G1-3) in Nepal. Future readers are expected to conduct further analyses based on their specific interests, leading to discussions that contribute to future policy development.

The following is a summary focusing on the aspects directly related to the IBSE project goals from the preliminary results of this study. IBSE, as a technical cooperation initiative, aims to improve students' mathematical abilities by properly using CDC's official Student Workbook, which was developed with technical support from the previous JICA supported IMEN project. Additionally, it plans to develop and implement teacher support measures at the school and local government (LG) levels to ensure that teachers can effectively use the student workbooks and address students' individual learning needs.

The following summary is structured around three main questions:

(1) What are the factors related to students' academic improvement?
(2) What are the future prospects for teacher training at the LG level?
(3) What is the status of students, teachers, and others regarding gender and ethnicity/caste, which is a key focus of this project?

As for the school conditions revealed by the Head teacher's questionnaire, these are not directly related to IBSE's intervention areas and will not be discussed here. Further analysis and review by relevant stakeholders are encouraged.

Lastly, the issues of gender and ethnicity/caste, which are focal points of this project, will be addressed in a separate section.

3.1 Findings on Mathematics (Factors Affecting Student Test Scores and Their Actual Status in Classroom)

The questionnaire survey and lesson observation results revealed the student and teacher attributes that correlate with test scores, the statistical significance of these attributes, and how these factors are implemented in the classroom.

Mother Language Impact on Test Scores

The survey found that a student's mother tongue does not significantly impact their test scores in mathematics. Nepali-speaking and Maithili-speaking students struggled with word problems, indicating that reading skills appear to influence maths scores more than language background. The IBSE initiative will conduct further research to clarify the extent to which reading skills impact students' maths performance in actual classroom settings.

Economic Status and Learning Outcomes

The survey reaffirmed that the economic status of a student's family significantly impacted their maths learning. Students from economically disadvantaged backgrounds encountered greater challenges in achieving academic success. To address this, IBSE recommends developing inclusive lesson strategies and providing additional teacher support for financially needy students.

CDC Workbook Usage and Challenges

The CDC workbook was identified as an essential factor, but the survey showed that its intended impact has not been fully realized due to improper usage by teachers. While most students were confirmed to have access to the workbook, many teachers did not implement the workbook exercises correctly. Instead, some teachers created new worksheets or selectively chose content from the workbook. IBSE recommends that MoEST ensure teachers and students are equipped with the workbook. Additionally, IBSE suggests that CDC provide clear instructions in both the workbook and the teacher's guide to enhance proper utilization.

Limited Use of CDC Self-Learning Material

The survey could not evaluate the effectiveness of CDC self-learning material (SLM) because of its limited usage in schools. Therefore, IBSE highlights the importance of careful consideration before any future distribution of SLM to ensure that its intended benefits can be realized.

Homework Completion and Impact on Scores

The survey found a strong correlation between students who complete their homework and improved test scores. However, it was noted that teachers often concentrate only on whether the homework is correct or incorrect when reviewing it, rather than addressing students' understanding. IBSE recommends developing strategies to support students who struggle with homework issues. Such strategies may include peer learning or other alternative methods to help students grasp challenging concepts.

Impact of Student Attendance

Student attendance was shown to have a moderate correlation with test scores. Observations indicated that the number of students present in the classroom was generally lower than the number officially enrolled. Consequently, students with frequent absences tend to achieve lower test scores. IBSE suggests implementing measures to enhance student attendance and mitigate its negative impact on academic performance.

Student Interest in Maths and Performance

The survey also found that students' interest in maths significantly influenced their performance. Only a small percentage of students (about 10% of the class) were able to solve math problems successfully,

while many others relied on copying notes from those who performed well. The factorial analysis confirmed that students who enjoy maths and actively engage in learning tend to score higher, whereas those who find maths difficult generally achieve lower scores. IBSE recommends providing targeted support for students struggling with mathematics to improve their engagement and comprehension.

Pair Work and Math Achievement

Pair work was identified as a moderately significant factor positively correlated with maths scores. However, observations indicated that teachers rarely instructed students to engage in pair work. Interestingly, while teachers did not assign it, some students reported that they voluntarily collaborated with their peers. IBSE recommends encouraging teachers to actively promote pair work as part of their instructional strategies to improve learning outcomes.

Teacher Training and TPD Certification

Teacher participation in TPD certification training significantly impacted student test scores. However, despite this positive correlation, teachers who completed TPD training still used the workbook inconsistently, often overlooking the development of students' mathematical concepts. IBSE recommends expanding TPD training with a stronger focus on effective workbook implementation. Additionally, in some schools, teachers who attended TPD training shared their knowledge informally with colleagues, but formal information-sharing meetings were not held. IBSE suggests promoting school-wide information-sharing meetings following TPD training to ensure best practices are disseminated effectively.

Concerning the TPD certification training, a limited number of teachers underwent the training, while many others expressed a desire to participate according to the teachers' focus group discussion.

Teacher Response to Individual Students

The survey revealed that teachers' increased responses to individual students negatively impacted student performance. At the same time, teachers tend to focus on supporting students who successfully complete assignments while giving limited attention to those who struggle. IBSE recommends equipping teachers with strategies to better assist students facing difficulties in problem-solving to enhance their learning outcomes.

Impact of Teacher-Guardian Communication

Communication between teachers and students' guardians positively correlated with improved test scores. This indicates that strong communication between teachers and parents enhances student achievement. IBSE recommends encouraging schools to implement better communication strategies between teachers and parents to further improve student outcomes.

Professional Communication between teachers and head teachers

The survey revealed that professional communication between teachers and the head teacher has a positive correlation with test scores. This highlights the significance of promoting professional dialogue among the teaching staff. IBSE advocates for increasing professional communication between teachers and head teachers to improve educational outcomes.

3.2 Findings on Nepali Language

Classroom observations were conducted in schools located in one district from each of the Himalayan, Hill, and Tarai regions, as well as from Eastern, Central, and Western Nepal. Two schools from separate local governments within the three districts were selected. Five of the schools were secondary, and one was a basic school (L3), with Grades 1, 2, and 3. In total, six classrooms were observed during this period. After the observations, a focus group discussion with the teachers was also conducted.

Use of Teaching Materials

In the three lessons observed, the use of teaching materials such as charts, picture cards, word cards and alphabet cards made the learning process effective. However, in other classes, such materials were not used, and learning facilitation was not effective. This provides a strong pedagogical implication that teachers need to facilitate learning using teaching materials as per the need of the lesson.

Teachers' Subject Specific Knowledge

The Government of Nepal has no provision of subject-specific teachers for grades 1–5, meaning teachers in grade 1-5 will have to teach any subject at that level. The teachers who have not studied Nepali as a major subject in higher education are also teaching Nepali at the basic level. In such cases, a lack of adequate subject knowledge in such teachers may lead to issues with inaccurate writing in the Nepali language. For example, in L3, the teacher made five spelling mistakes while writing a single sentence on the board after referring to the workbook. Similarly, in L5, there were problems with syntax in a sentence written by the teacher. Upon discussing with them after class, it was found that they had not studied Nepali as a major subject in higher education.

Multilingual Classroom Teaching

While teaching students with diverse native languages, their mother tongue should also be utilized to enhance learning. In one class, even though there were students whose first language was Doteli, the instruction did not incorporate their language, which left the students feeling confused.

Development of Soft Skills in Learning Facilitation

The integrated curriculum emphasizes not only subject knowledge but also the development of soft skills

through effective learning facilitation. However, in all classes, there was no focus on essential skills such as personal skills, interpersonal skills, and civic skills. As a result, it appears that the educational objectives outlined in the curriculum are not being adequately achieved.

Teacher Unawareness of Workbook Instructions and Color Coding

In classroom activities, the workbooks include clear instructions based on color coding:

Red: activities require full teacher support.

Blue: activities require partial teacher support.

Green: activities are meant for peer learning or practice with a study partner.

Orange: activities are for independent practice by each student.

Despite these explicit guidelines provided in the teacher's manual, teachers were found to be unaware of them. For example, in an L5 class, a red-coded activity designed for speaking skill practice was instead conducted as a writing exercise, with only partial support from the teacher.

3.3 Findings on English Language

Three districts were randomly selected to represent three geographical regions in Nepal: Terai, Hill, and Mountain. Sankhuwasabha represented a mountainous region. Syangja represented hill. Kanchanpur represented Terai. One school, each of the two local levels from the selected districts, was chosen for classroom observation and focus group meeting (FGD).

Teacher Preparedness

There is a significant gap in teacher training regarding integrated curriculum implementation. During informal discussions, participant teachers in the study reported that they were not sufficiently prepared to respond to the needs of students in the classroom. Varying levels of students' proficiency have significantly added complexity to classroom instruction. Based on informal conversation and classroom observation with the teachers, it was revealed that teachers neither got the opportunity to learn about integrated curriculum during pre-service teacher preparation nor sufficiently during their in-service teacher training. Teachers were in a state of confusion about how to handle an integrated curriculum. Participant teachers expected sufficient training to translate curricular goals into classroom practice.

Responsiveness to Diversity

Classrooms are diverse in terms of ethnicity, home language, and learning levels, which complicates English language instruction. Many students are more comfortable with their mother tongues. Consequently, teachers frequently shift to using Nepali to explain concepts which diminishes students' exposure to English and hinders their language learning. Students in the observed lessons often exhibited passive learning behaviors showing reluctance to engage in interactive activities such as discussions or writing exercises. This passivity might have resulted from a lack of confidence in their English abilities and a preference for Nepali medium instruction. Moreover, a diverse linguistic background complicates

the teaching process. However, teachers use Nepali and English, which dominate classroom instruction. In lesson 6, the teacher sometimes explained in the local language (Doteli) to make the concept clear to the students. In all the lessons observed, the teachers were struggling to meet students' individual needs.

Motivation, Engagement, and Participation

The concepts of motivation, engagement, and student participation in the observed English language teaching lessons are complex. Motivation plays a crucial role in language learning. Some students in the observed classrooms were found to be demotivated and disengaged in the lesson. Moreover, none of the students were equally participating and engaging in the lesson. Classroom instructional delivery was mostly one-way traffic from the teachers' side, as a 'sage on the stage.' Teachers seemed more actively engaged rather than making students participate in the activities and letting them become engaged. Many teachers rely heavily on the Nepali language during English lessons to ensure comprehension. Over-reliance on the native language can hinder the development of English proficiency among students.

Sufficiency of Resources

During the field visit, it was revealed that schools lacked adequate resources. Only limited teaching materials and resources were available for instruction. Classrooms often lacked supportive teaching and learning materials to create a better learning environment and engage learners. Insufficient resources certainly limit the quality of education. Depending only on workbooks may not be enough to engage students. The use of audiovisual aids can enhance the language learning of diverse students.

Assessment

Regular formative assessment is necessary to promote students' progress. However, observed lessons revealed that its implementation has faced significant challenges. Inconsistent assessment practices among teachers might be the hangover effect of traditional assessment practices. A mismatch and a notable disconnect between intended curriculum goals and the actual assessment practices were observed. Schools are still found to have practised the system of terminal exams and final exams instead of using regular assessment as a part of instruction. Their focus was much on assessment of learning with limited focus on assessment for learning and assessment as learning. In most of the observed schools, an assessment portfolio was maintained but not on a regular basis, as intended by the curriculum. The total marks were broken down to fit the portfolio sections to show during supervision. Records were kept only before or after the terminal/final exams, but not on a regular basis for improving learning, assessment, and remedial teaching.

Translation

Heavy translation from English to Nepali dominated most of the classroom instructional time in some of the lessons observed. Particularly in two classes, the teachers relied significantly on translating into Nepali to explain English vocabulary, grammar, or concepts. Instead of using English to teach English,

the teachers frequently translated back and forth between Nepali and English. Students do not get enough exposure to the target language this way. They become reliant on translation. As a result, it develops dependence and encourages students to become passive learners, expecting the teacher to translate everything for them. This hinders students' independent language learning strategies.

Anxiety and Hesitation

During classroom observation, one of the pertinent issues was student silence. In most of the classrooms observed, the majority of the students hesitated to speak. They may be afraid of making mistakes, being judged, or ridiculed for grammatical or pronunciation issues. Hesitation may have resulted from anxiety. When students are anxious, they may hesitate to participate in classroom activities, ask questions, or engage in conversations. Therefore, to lower their affective filter, activities that promote interaction and communication in pairs or small groups can develop their confidence.

3.4 Findings on Hamro Serofero

All the information was collected primarily through lesson observation in schools and focus group discussion with stakeholders. The selection criteria for the schools were based on regions, the Terai, Hilly, and Mountainous areas, two schools from one district in different local governments from the three districts. Six lessons were observed during the study; five schools were secondary, and one was a basic school.

Ineffective Classroom Structure

The classroom structure in the three lessons observed was a traditional row arrangement, and did not allow the students to receive equal attention from the teacher. Some students might receive more attention in such seating arrangements while others get overshadowed. This imbalance can hinder learning opportunities and create disparities in student engagement and academic progress. A class should be well-structured to facilitate equal participation, ensuring that every student benefits from the teacher's support and instruction.

Lack of Consistent Student Engagement Across Lessons

There was a significant variation in how lessons were initiated and conducted. While two lessons used creative activities to capture attention, others lacked such approaches, leading to passive and disengaged learners, reviewing previous lessons, teaching using lyrics and showing drawing charts. These creative approaches engaged the students and motivated them to listen actively. However, the other lessons lacked interactive and stimulating activities, which caused reduced interest on most of the students and, created opportunities for distractions. When lessons fail to engage students actively through projects, discussions, role-playing and real-world applications of lesson contents, they tend to be involved in side-talking or irrelevant activities, such as playing with pencils, eating tiffin, doodling, etc. Maintaining students' focus and enthusiasm throughout all lessons becomes challenging without a consistently

engaging teaching strategy, ultimately affecting their learning experience and overall academic performance.

Insufficient Attention to Individual Learning Differences

It was revealed that teachers often failed to address the diverse learning needs of their students. Those struggling to understand instructions or keep up with the class were frequently overlooked, leaving them isolated and disengaged. Inclusive practices, such as personalized support or differentiated instruction, were rarely implemented, creating a sense of individualism and detachment among learners. Additionally, the large number of students in a class of Terai region school made it challenging for teachers to provide individual attention. This lack of personalized engagement fosters a sense of individualism, where students feel detached from the learning process rather than being part of a supportive academic environment. While peer support could effectively bridge this gap, it was not systematically encouraged, leaving students struggling without the necessary guidance to improve.

Overreliance on Workbooks and Limited Additional Activities

Based on the lesson observations, it was found that there was a heavy reliance on workbook exercises, with minimal emphasis on activities beyond the curriculum, failing to incorporate modern tools and technology that enhance conceptual understanding. For instance, the use of videos and smart TVs where the concept is shown in diverse formats could effectively clarify the complex concepts; role-playing activities could help students better understand real-life situations, such as those covered in Hamro Serofero. In other cases where materials were used, they were not always effectively integrated into the learning process. It is essential to integrate digital resources, hands-on activities, and experiential learning techniques into teaching learning process as per the intent of curriculum, not just for the sake of use, to enhance student engagement and comprehension

Problems in Time Management During Lessons

According to the curriculum, the allocated credit hours per week for 'Hamro Serofero' is eight per week, but most of the schools we visited allocated hardly five hours per week. The absence of a well-structured lesson plan leads to inconsistent time distribution across different teaching and learning activities. Without proper planning, both simple and challenging topics are often given the same amount of time, causing students to lose interest in easier lessons while feeling overwhelmed and confused when tackling more complex concepts due to insufficient time. The observed lessons focused excessively on workbook content, neglecting time for interactive or practical activities. This results in rushed or incomplete learning experiences for students. Furthermore, classrooms were not well-managed, with students disengaging and talking among themselves during lessons.

Lack of Multidisciplinary Integration

Despite the integrated curriculum framework, most of the observed lessons failed to connect themes with other subjects effectively. A contributing factor to this issue may be that not every teacher is

competent or confident enough to integrate subjects beyond their expertise. Teachers primarily focused on their respective subjects, avoiding interdisciplinary connections. The real cause of this issue needs further research. Even though a few teachers recognized the importance of subject integration, they often struggled to apply it

Limited Assessment and Feedback Mechanisms

Assessments in the observed class primarily focused on workbook exercises and oral questioning, with little variety in assessment tools. Feedback, when provided, was often immediate and corrective in nature, but lacked in-depth feedback. The absence of meaningful feedback and review processes limits students' ability to reflect on their performance and improve on their mistakes. A shift towards diverse and simplified assessment tools is necessary to enhance learning outcomes.. This also indicates that teachers need a real hands-on training on assessment for learning that goes beyond error correction, guiding students to engage more deeply with their learning process.

Lack of Structured Lesson Closure

Most of the observed lessons ended without a proper wrap-up, as teachers often neglected to summarize key points or to reinforce the main concepts covered. Instead, the focus was placed solely on assigning homework mostly in workbook exercises, without ensuring that all students have grasped the lesson's objectives. In some cases, teachers did not even review the assigned exercises, moving on to the next topic without any discussion. This suggests having a structured lesson plan with proper learning activities, and closure including a summary of key points, a review of understanding, and thoughtful reinforcement of concepts before home/class assignment.

3.5 Findings Regarding Gender and Ethnicity

This section analyzes the influence of gender and socio-cultural factors on student learning outcomes and provides recommendations for IBSE interventions. The findings are based on a survey that examined student performance, gender representation, and social dynamics in educational settings.

Gender Differences in Student Performance

The survey revealed noticeable differences in test scores between boys and girls. On average, Grade 4 girls scored lower than boys. However, the data collected did not provide sufficient insight into the reasons behind this performance gap. Observations during the study indicated minimal interaction between boys and girls during learning activities, which may contribute to the gap. Moreover, separate seating arrangements for boys and girls were commonly observed. To address this issue, IBSE will incorporate gender-based learning data collection in future activities to better understand the root causes of performance disparities and develop targeted intervention strategies to promote balanced learning outcomes.

Ethnicity and Socio-Economic Factors in Student Performance

The study also examined the influence of ethnicity and caste on test scores. The results showed that the average math test scores were as follows: Janajati group: 8.2, Dalit group: 6.6, B/C group: 9.1, and Other groups: 7.4. These differences in performance are believed to reflect underlying socio-economic disparities between groups. While ethnicity itself may not directly influence learning outcomes, the socio-economic conditions of each group likely play a significant role. IBSE recommends conducting further research to identify specific socio-economic challenges faced by students and to develop targeted strategies to support disadvantaged groups.

Gender Representation in Educational Roles

The gender balance in the education system was analyzed across different roles:
Student Population: Girls (52%), Boys (48%)
Teachers: Female (52%), Male (48%)
Head Teachers: Female (9%), Male (90%), Others (1%)
LEU Officers: Female (22%), Male (78%)

These statistics reveal significant gender disparities in leadership roles, especially in head teacher and LEU officer positions. IBSE recommends promoting gender-inclusive leadership development programs to enhance female representation in decision-making roles within the education sector.

Gender Considerations in TPD Certification Training

The survey indicated that 89% of target LEU officers actively consider gender balance when selecting participants for TPD certification training. This proactive approach exemplifies an encouraging effort to promote gender inclusiveness in teacher development programs. IBSE recommends strengthening this practice by developing clear guidelines to ensure gender equity in all TPD certification programs.

Gender Issues in Student Learning Plans

The survey revealed that 76% of target LEU officers confirmed their LG's education plans address gender issues. This suggests that a majority of LGs are aware of the importance of considering gender in improving student learning outcomes. IBSE will work alongside LGs to expand these efforts and ensure that gender equity strategies are effectively implemented in school improvement plans.

3.6 Findings on TPD Certification Training on IC at ETC level

The IBSE Project team visited 7 ETCs from October to December 2024 to gather information on the implementation status of TPD certification training on IC at ETCs.

Implementation Status of TPD Certification Training on IC in this Fiscal Year

Although the revised TPD framework was introduced in October 2024, CEHRD has not yet finalized the curriculum of TPD certification training on IC based on this framework as of January 2025. CEHRD

drafted the training curriculum and conducted a consultation meeting with concerned people (teachers, headteachers, Roster Trainers, etc.) to collect comments and suggestions for the draft. After this consultation meeting, CEHRD submits the draft to the Council for Educational Human Resource Development for approval of the curriculum.

As for the TPD certification training on IC, since there are still some trainees who are eligible for training based on the former TPD framework (those who did not take the Phase 2 training), the TPD certification training on IC (Phase 2) in accordance with the former TPD framework has been budgeted for this fiscal year. The training will be implemented in all ETCs by the end of this fiscal year (June 2025). Specifically, ETC Sunsari has made good progress, with approximately 70% completed as of October 2024, and ETC Tanahun has also done approximately 60% as of November 2024. However, the training for those who have not completed the TPD certification training on IC (Phase 2), excluding ETC Dipayal, cannot be completed in this fiscal year only. Therefore, the six ETCs need to request a budget from CEHRD to continue the implementation of the TPD certification training on IC (Phase 2) in the next fiscal year and beyond.

CEHRD aims to complete the TPD certification training (phase 2) within 2 years. Thus, the current fiscal year and next fiscal year will be the phase of transition to the new TPD framework, and it is anticipated that training based on both the older framework and the new framework will be conducted simultaneously. As mentioned above, the curriculum for the TPD certification training on IC based on the new TPD framework has not yet been approved as of January 2025, and CEHRD is still developing the training materials. Once these are finalized, master trainer training will be conducted at CEHRD, and then training will be provided at each ETC.

Implementation Method of Certification TPD Training on IC

The TPD certification training on IC (Phase 1) based on the previous TPD framework was conducted either face-to-face or online (utilizing Zoom and Google Meet) mode at all ETCs, excluding ETC Dipayal. The training is not implemented in a hybrid mode of face-to-face and online mode, with simultaneous delivery. Based on the allocated budget, it is being carried out using only one method, either face-to-face or online. The Phase 2 training scheduled for this fiscal year will be conducted either face-to-face or online mode in the same manner as Phase 1. In ETC Dipayal, Phase 1 was conducted in a face-to-face mode only, and Phase 2 is also planned to be held in a face-to-face mode only. ETC Rupandehi, on the other hand, responded that any of the methods, including face-to-face, online, hybrid, and use of LMS, are technically feasible. In practice, however, as with other ETCs, it is implemented face-to-face or online mode. The TPD training based on the new TPD framework scheduled for this fiscal year is primarily planned to be conducted in a face-to-face mode only.

Differences in Understanding and Quality depending on the Mode of Training

Regarding the differences in understanding and quality by mode of the training delivery, ETC Rupandehi responded as follows. "There was no difference in participants' level of understanding or the quality of training, whether face-to-face or online, and both modes of training provided sufficient opportunity for discussion and promoted deeper understanding among the participants." ETC Sunsari also responded,

"There is no significant difference between the two training modes in terms of level of understanding and quality. This is because the selection process for the online training is strict, and only those with digital skills and knowledge are selected." These ETCs believe that whether the training is conducted face-to-face or online does not have a significant impact on the quality of the training. On the other hand, the other five ETCs believe that face-to-face training improves the quality of the training more than online mode of training.

The main responses are as follows:

- Participants become more interactive through the face-to-face mode, with more opportunities for discussion. Therefore, face-to-face training improves the quality of learning as it is more interactive and focused.
- Face-to-face training promotes a deeper understanding and better retention of what the trainee has learned.
- In face-to-face training, participants' feedback can be obtained immediately, allowing real-time adjustments based on their learning needs.
- Face-to-face sessions promote greater engagement through direct interaction, hands-on activities, and collaborative discussions.
- Body language and nonverbal signs are important to further enhance communication, increase participants' understanding, and maintain interest. Therefore, the face-to-face mode of training is more effective.
- Face-to-face is less distracting and allows the participants to focus on the training.
- Face-to-face sessions promote more engagement, immediate feedback, and direct involvement in practical work and group tasks. And it improves the quality of understanding and practical skills. Although online sessions provide flexibility and accessibility, there are significant challenges in maintaining attention and active participation.

3.7 Findings on Implementation of the TPD Activity at the LG Level

The following section examines the current implementation status of Teacher Professional Development (TPD) at the local government (LG) level. It highlights the key findings from the survey regarding LG education plans, TPD training, LEU meetings, and the presence of Resource Experts (RE). It provides recommendations for IBSE interventions to strengthen TPD implementation.

LG's Education Plan and Policy Priorities

The survey revealed that education development is a significant policy priority at the local government (LG) level. Education development (26% of LGs rank it as their top priority) was identified alongside social development as one of the foremost priorities. In Dhading and Saptari, about one-third of LGs (34%) recognized education development as their highest priority. In Kanchanpur, 78% of LGs indicated that they have a specific education development plan, while in Syangja, none of the LGs had such a plan in place. Furthermore, 30% of LGs emphasized "improving early-grade education" as a crucial focus within their education development strategies. Based on these findings, IBSE activities should prioritize developing model practices in LGs that concentrate on education development, particularly early-grade education, while also expanding IBSE interventions across all LGs to ensure enhanced educational outcomes.

Implementation of TPD Training

The survey revealed that the average difference in test scores between students taught by teachers who attended customized training and those who did not showed a statistically significant difference. In the previous school year, 63% of LGs conducted at least one five-day customized training program for Grades 1–3. Across all surveyed districts, a total of 2,226 participants attended these training sessions, which translates to nearly 30 teachers trained per LG on average. For the current school year, 44% of LGs plan to conduct one group of TPD training, while 26% intend to hold two batches of training. These results indicate that the majority of LGs are actively implementing customized TPD programs to enhance teacher capacity and improve student learning outcomes.

LEU Meetings and Training

The survey revealed that 57% of LEU meetings are held monthly, while 41% take place every 2–3 months. All surveyed districts, except for Dailekh, confirmed that LEU members meet at least every 2–3 months. Dailekh faces accessibility challenges that hinder regular meetings. Additionally, 59% of LEU staff reported receiving training in the integrated curriculum (IC), leaving around 40% of the staff without such knowledge. To enhance TPD implementation, IBSE should utilize regular LEU meetings to distribute orientation materials and resources. Moreover, IBSE should address the 40% knowledge gap among LEU members by designing targeted IC training to strengthen their capabilities.

Presence of Resource Experts (RE) and Related Support

The survey found that one-third (33%) of LGs have assigned Resource Experts (REs). Additionally, about 20% of LGs independently appointed school supervisors who perform roles similar to those of REs, apart from those designated by MoEST. However, only 18% of LGs have secured budgets for RE deployment, highlighting a lack of dedicated funding for this position. Regarding school visits for TPD activities conducted by REs, Resource Persons, and LEUs, 73% of respondents reported either "no information" or "zero visits." This reveals a critical gap in school-level TPD support. IBSE should develop orientation materials to guide the use of CDC workbooks and provide resources to LGs that have assigned REs. By collaborating with these LGs to establish model practices, IBSE can enhance the effective deployment of REs and ensure improved TPD delivery at the school level.

Chapter IV. Suggestions and Recommendation (Towards Outputs 2 and 3)

4.1 Main Issues and Suggestions for the Effective Implementation of IC

CDC conducted an independent survey on the Integrated Curriculum (IC) prior to the IBSE baseline survey, and based on the results of the survey, a more detailed survey was conducted to gather information necessary for the implementation of the IBSE Project activities.

4.1.1 Findings through the IC Evaluation Conducted by CDC

According to the CDC report "Evaluation of the Effectiveness of Integrated Curriculum (Grades 1-3)" (2024), the following advantages and challenges were identified. The following suggestions were also made to address the challenges:

(1) Advantage

- Positive reactions from teachers (Head teacher and teachers)
- Strong commitment from the school to implementing thematic approaches
- Parents have reported positive changes in their children's learning (Improved interest in learning, creativity, critical thinking, etc.)

(2) Problems to be Solved

- Teachers face challenges in understanding social, scientific and environmental concepts.
- There are problems regarding teaching students by teachers.
- Lack of soft skills among teachers
- Teachers have difficulty with formative assessment, especially in assessing students' learning by using portfolios.
- A mismatch between the skills required of teachers and the training contents
- Weak involvement of SMC members

(3) Suggestions

- To implement comprehensive training programs (Clarifying social, scientific and environmental concepts and focusing on acquiring soft skills)
- To coordinate appropriate resource allocation (Resource allocation to schools by local governments)
- To review the curriculum regularly and strengthen the curriculum
- To create parent participation programs
- To establish a monitoring and support system
- To strengthen communication and collaboration between SMC and CDC
- To promote research by teachers
- To establish a mini research fund (for CDC and university students)
- To strengthen cooperation with ERO

4.1.2 Findings through IBSE Baseline Survey

(1) Characteristics of Integrated Curriculum (IC)

- The introduction of IC has brought a major innovation in Nepalese education. In recent years, the practice of IC in primary education has become commonplace around the world, especially in educationally advanced countries (such as Northern Europe, Canada, and Australia). This is because they aim to spread Child-Centered Education (Connecting learning with daily life, and content with skills) in primary education. However, compared to the traditional subject-based and systematic approach, IC requires teachers to have high qualifications and abilities as educational practitioners. In Northern Europe, Canada, Australia, and other countries, most primary school teachers have completed a master's degree at graduate school. In this respect, there is still a large gap between the introduction of the Integrated Curriculum (IC) in Nepal and its practice.

The contents of the four subjects of "Mero Nepali," "My English," "My Mathematics," and "Hamro Serofero" for Grades 1 to 3 are integrated under the following 14 themes. However, lessons or units of the "Mathematics Workbook" of Grade 1 have not been arranged by theme yet.

1. Me and my family	2. My daily life	3. Our community
4. My school	5. Animals around us	6. Our environment
7. My work	8. Hobbies and interests	9. Our culture
10. Communications technology and markets	11. Vegetables and fruits	12. Birds and animals
13. Our activities	14. The World around Us	

- Because the content was structured around common themes in all four subjects, there are many areas where the real sequence of thematic integration of each subject is lost. In particular, the loss of sequential content integration in "Mathematics" has caused students to have difficulty in understanding what they are learning. For example, the content is sequenced from "Length" (Grade 1) to "Volume" (Grade 2)

  (The problem of Vertical Connectivity).

- When looking at the learning contents of four subjects in a certain grade, even though they are organized under the same theme, there is less horizontal relationship between each subject. For example, the contents of the four subjects under the theme "My school" are as follows

  (The problem of Horizontal Connectivity).

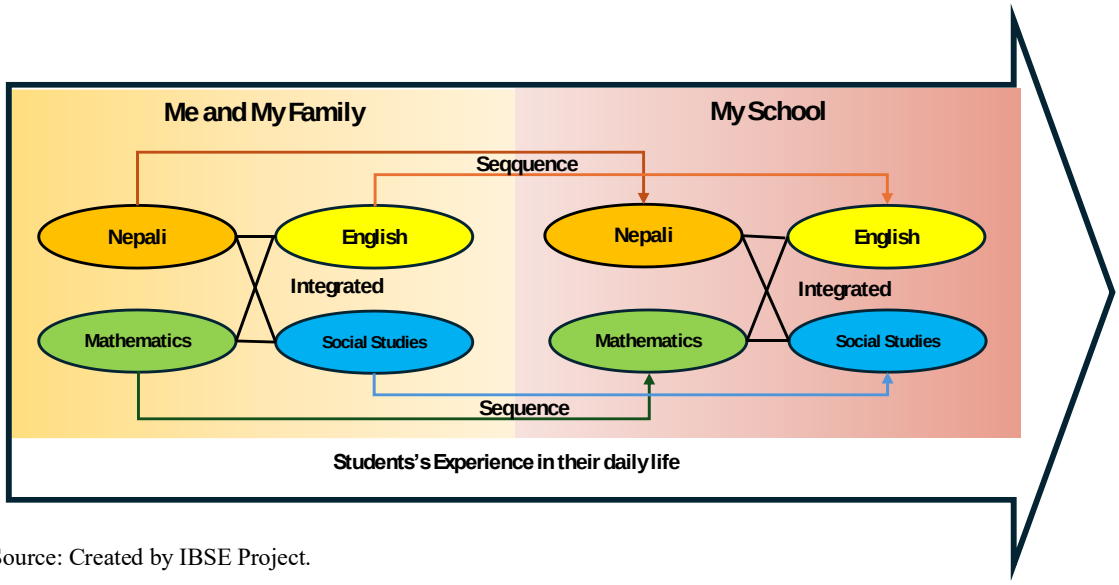
Table 4-1 Contents of the four subjects under the theme "My school"

Mero Nepali	My English	My Mathematics	Hamro Serofero
• Going to school • Swamp • Fire • Reading with my sister	• Lunch box • School doctor • Homework • Durbar high school • Chapter-end test	• Length • Area • Multiplication • Fraction	• Class • Motion • Safety • Schoolyard • Disaster

• What should I do?	• Timetable		

(2) Future Directions for Improvements

- Conduct training courses to strengthen teachers' understanding of IC and improve their teaching skills.
- Arranging the lessons of Grade-1 "Maths." into the theme (same as G2 and 3) would be done, it can be said that IC would complete the Integration. Grade-1 students are the ones who really need the Child-Centered Education.
- Revise the current IC through consideration of Vertical and Horizontal Connectivity among the contents.
- In order to implement IC effectively in schools, it is very important to create an appropriate "weekly timetable" and "annual lesson plans." IC aims to teach one common theme simultaneously in four subjects, so that the learning contents of each subject can be understood in relation to daily life. In other words, as shown in the figure below, it aims for a synergistic effect among the four subjects. However, there are not the common themes placed in the same order in the curriculum and hence, the same theme is not taught simultaneously. For example, in Grade 1, students are learning "Me and My Family" in Mero Nepali, but "My School" in "Hamro Serofero."



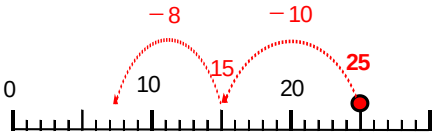
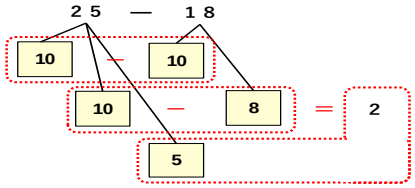
Source: Created by IBSE Project.

Figure 4-1 The Ideal Synergy among Four Subjects that IC was Originally Intended

4.2 Issues Concerning the Mathematics Curriculum

"Mathematics" (Grade 1 to 3) in IC introduced in 2019 has not changed much in contents from the previous "Mathematics," but there has been a major change in the teaching methods and approaches. Specifically, it is a change from the traditional/cultural approach (also used in Europe, America, South Asia, and Africa) that has been adopted in Nepal to the East Asian approach (used in Japan, China and South Korea). The main differences in these approaches are shown in the table below.

Table 4-2 Nepal's approach and East Asian approach

Learning Contents	Nepal's Traditional and Cultural Approach	East Asian Approach
Number Recognition	• **Counting Principle** (Count and recognize as 1, 2, 3, ...)	• **Intuitionism** (Instead of counting, intuitively recognize from the image of concrete object → semi-concrete object → number)
Addition & Subtraction	• **Counting Principle** (Imagine a number line and do calculations. However, people count 1, 2, 3, ... in Nepal.) 【例】25－18  • No emphasis on problem situations: only "Merger" and "Remainder" • Emphasis on mental arithmetic	• **Intuitionism** • **Suido Method** (Calculated with tiles, blocks, or bundles of 10 in mind)* • Composite decomposition of numbers 【Example】25－18  • Emphasis on problem situations: "Merger" and "Increase" in additions, and "Remainder," "Complement" and "Difference" • Emphasis on longhand arithmetic
Multiplication & Division	• No focus on problem situations • Multiplication structure: <How many> x <How many times> • Multiplication= Accumulation • Division=Cumulative Reduction → "Inclusive Division" only • Emphasis on mental arithmetic	• Emphasis on problem situations • Multiplicative structure: <Number in one group > x <Number of group> • Division: "Inclusive Division" and "Equal Division" • Emphasis on longhand arithmetic
Fractions & Decimals	• Learn fractions first, decimals later • Operations with "divided fractions" (Theoretical error) • Disregard for long division decimal calculations	• Learn fractions and decimals together or Learn decimal first, learn fractions second, but in new curriculum of Nepal, Nepal's traditional and cultural approach was adapted. • Operations with "quantity divisions" and "fractions as numbers", but in new curriculum of Nepal, Nepal's traditional and cultural approach was adapted (Theoretical error) • Emphasis on long division decimal calculations

*Suido Method: This method is a theory for efficiently understanding the most basic concepts and procedures of calculation methods. In 1958, Mr. Toyama and Ginbayashi, Japanese Mathematicians, proposed it.
Source: Created by IBSE Project.

(1) Improved Points from the Old Curriculum

- The diagrams and charts became colorful and attractive, which motivates students to learn more.
- By emphasizing problem situations in arithmetic calculations, it became easier for students to understand in what situations addition, subtraction, multiplication and division are used. =>Improving the critical thinking and problem-solving abilities of students.
- The relationship between multiplication and division became easier to understand.
- The algorithm for decimal's longhand arithmetic is explained in detail, making the calculation method much easier to understand.
- Student's learning activities are shown with different colors depending upon their activity methods like below. This can make the implementation of learning activities more effective.

Table 4-3 Student's learning activities shown with different colors in CDC workbook

Colors	Methods for Conducting Student's Learning Activities
Red	When students conduct this learning activity, it is necessary for teachers to provide students with a full support.
Blue	When students conduct this learning activity, it is necessary for teachers to provide students with partial support.
Green	Students conduct this learning activity by pair or group.
Orange	Students conduct this learning activity by themselves.

(2) Necessary Future Improvements

- Many teachers in schools are not aware of the major changes in teaching methods and approaches mentioned above. They continue to teach using the traditional approaches. For example, in the case of addition and subtraction, the explanation uses tiles and arrows as shown below. The original intention of this explanation is based on Intuitionism: "Instead of counting, intuitively grasp 4 and 1, and add them together to get the answer 5." However, in the real lesson practices, teacher's instruction is: "Count the tiles, such as 1, 2, 3 and 4, and then add one tile. The number of tiles is 1, 2, 3, 4, and 5. So, the answer is 5".

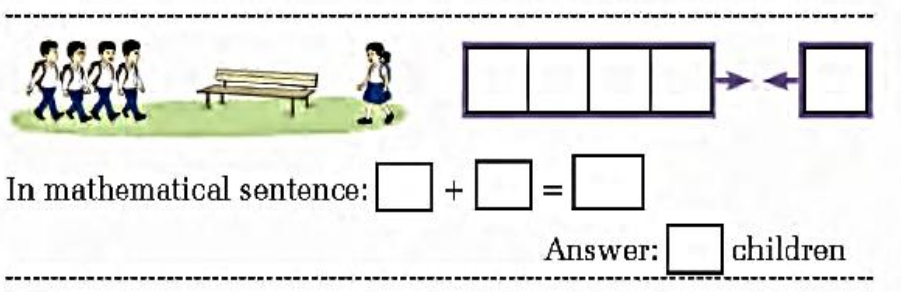


Figure 4-2 Explanation using tiles and arrows in CDC workbook

- One of the main reasons for the above is thought to be that many teachers do not have the student's workbook. Many teachers have teacher's guides. But in fact, there are some areas where the contents of the student's workbook and the teacher's guide do not correspond exactly, and there are cases where the teaching approach is not clear just by looking at the teacher's guides.
- It was observed that the approach of the student's workbook is new and the actual teaching approach of the teachers is different, which causes confusion in understanding and delivering the learning contents. In addition, schools that do not use the CDC workbooks (mainly in Syangja District) use workbooks published by private workbook companies, which have the same contents as the CDC workbooks, but whose approach remains the traditional and cultural approach of Nepal, and there is no discrepancy between the workbooks and the teaching approach of the teachers, which is assumed to make it easier for students to understand the learning contents (Note that in order to verify this assumption, a detailed analysis of the workbooks published by private workbook companies is necessary).

- When learning about fractions, students perform calculations while still using "divided fractions," Because "divided fractions" are not considered to be "numbers," it is necessary to replace the “divided fractions” with "fractions as numbers" before performing calculations. There are two methods for transitioning from "divided fractions" to "fractions as numbers." The first method is changing the charts from "dividing a figure" to a "number line" (This is a method used in Europe and America), and the second method is introducing "quantity fractions" between “divided fractions” and “fractions as numbers” (This is a method used in Japan, China and South Korea).
- As mentioned above, in the current Mathematics workbooks, student’s learning activities are color-coded according to the difference in their practical methods. Despite the fact that such groundbreaking innovations have been implemented, there is no mention of them in the student’s workbooks, nor is it clearly stated in the suggested facilitation activities in the teacher's guides. It is desirable that such important information that is useful for student’s learning be explained clearly and in an easy-to-understand manner in both workbooks and teacher's guides.
- The challenge for improving maths learning is to encourage more effective use of the workbook by both teachers and students. For example, while mathematics student workbooks employ color-coded learning activities to differentiate teaching methods, this innovation is neither clearly explained in the teacher guide nor clearly explained in the student's workbook. To enhance learning, such crucial information should be presented in both resources. Furthermore, IBSE must disseminate this information to all teachers working with MoEST, EDCU and LEU. Here, it is essential not only to provide teachers with this information, but also to provide technical assistance related to lesson design and its implementation in a classroom.
- Involving lesson design, another crucial aspect is for teachers to properly understand students' learning processes. As revealed by the survey's classroom observations, Nepali G1-3 teachers must shift from a one-sided teaching style where they dominate the class discussion and students merely follow instructions. Teachers will need to work daily to create a class structure and practice that allocates time for teacher explanations, time for students to tackle practice problems, and time for students to share ideas with one another based on the workbook, while the IBSE will support this initiative.
- The core of the approach will be a more detailed understanding of the actual conditions of technical meetings and teacher assemblies at school. It will be centered on ensuring active learning time through the use of WB and TG and strengthening teachers' learning support.
- To this end, it is essential to identify existing learning opportunities for teachers and establish a system that can be integrated into the regular school routine without increasing their workload.
- Additionally, while fostering an environment where teachers can work seamlessly, a monitoring

mechanism involving head teachers and other staff should be considered, aiming to create a sustainable support system.

Chapter V. Post-Baseline Survey Plan

The surveys subsequent to the baseline survey are planned to be conducted in April 2026 for the midline survey and in April 2028 for the endline survey. The reason for conducting each survey in April is that the maths test (covering content up to grade 3) is administered to students who are in grade 3 until March and move to grade 4 in April. The baseline survey, similarly, involved administering a maths test to 4th-grade students, focusing on content up to the 3rd grade.

The same schools, EDCU, and ETC are targeted in all three surveys. Furthermore, there will be a two-year interval between the baseline and midline surveys and, similarly, a two-year interval between the midline and endline surveys. With regard to the mathematics ability test, the same test will be administered across the baseline, midline, and endline surveys.

For the survey questionnaires directed at students, teachers, head teachers, EDCU, and ETC, the basic content will remain consistent. Regarding the issues clarified in the baseline survey, as well as questions whose intent was not understood or for which clear responses were not obtained, these will be carefully reviewed and refined during the preparation phase of the midline survey. In addition to selecting and discarding specific questions, the possibility of including new questions will also be considered.

The baseline survey will serve as the foundational data for comparative analysis with the data collected during the midline and endline surveys, with the objective of conducting both quantitative and qualitative analysis to assess how students, teachers, Head teachers, EDCU, and ETC have transformed as a result of their participation in this project.

Appendix

Appendix I. Questionnaire

1-1 Test (Statistical and Qualitative Analysis)

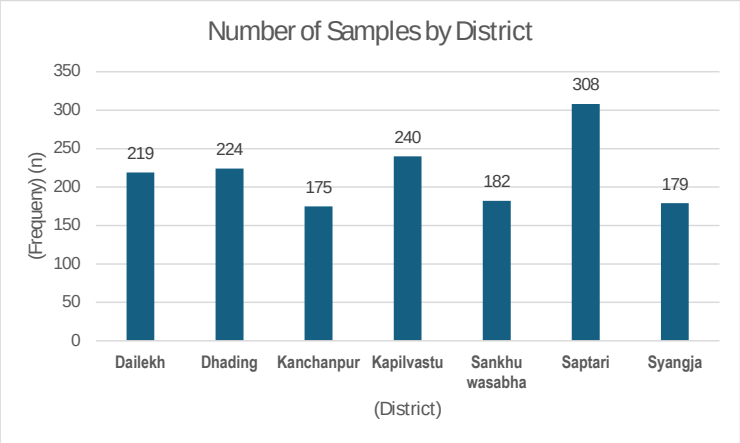
1-1-1 Sample of Students by District

The samples for this baseline report are as follows. The total number is 1,527. Saptari has the largest number (n=308), and the smallest is Kanchanpur (n=175). However, the sample size is relatively well-balanced over seven Districts.

Table 1-1 Sample by District

District	Freq.	%
Dailekh	219	14%
Dhading	224	15%
Kanchanpur	175	11%
Kapilvastu	240	16%
Sankhuwasabha	182	12%
Saptari	308	20%
Syangja	179	12%
Total	1,527	100%

Figure 1-1 Sample by District



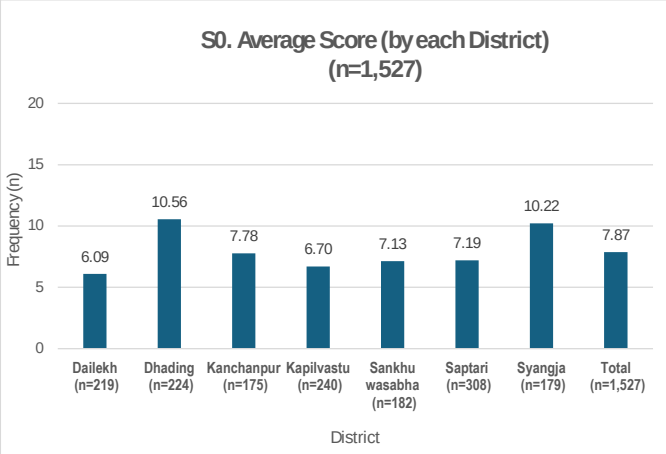
1-1-2 Average Test Score (Maths)

The average test scores by District are as follows. The overall average is 7.87 (Full mark point is 20 points). The highest scores are Dhading (10.56) and Syangja (10.22). The lowest score is Dailekh (6.09). The standard deviation (overall) is 4.53.

Table 1-2 Test Sore by District

District Name	Obs	Mean	Std.	Min	Max
Dailekh	219	6.09	3.37	0	18
Dhading	224	10.56	4.26	1	21
Kanchanpur	175	7.78	4.02	0	20
Kapilvastu	240	6.70	4.74	0	19
Sankhuwasabha	182	7.13	3.98	0	18
Saptari	308	7.19	4.31	0	19
Syangja	179	10.22	4.87	2	20
Total	1527	7.87	4.53	0	21

Figure 1-2 Average Test Score by District



1-2 Student Questionnaire

1-2-1 Sample of Students for Questionnaire

The samples of student questionnaires for this baseline report are same as mentioned in 2-1 above.

1-2-2 Data for Questionnaire for 7 Districts (National, District, and Gender-wise)

(a) Basic Information

(1) Gender

Gender reported by students is as follows. The overall ratio of girls and boys is 52% and 48%. The highest ratio of girls in seven Districts in Syangja (58%).

Table 1-3 Gender (Student)

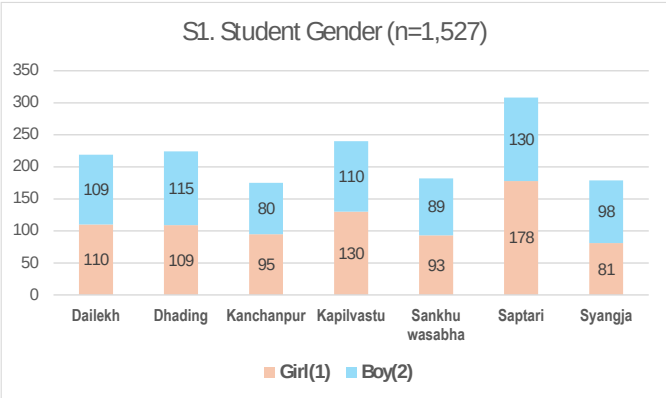
(n)

District	Girl(1)	Boy(2)	Others(3)	Total
Dailekh	110	109	0	219
Dhading	109	115	0	224
Kanchanpur	95	80	0	175
Kapilvastu	130	110	0	240
Sankhuwasabh	93	89	0	182
Saptari	178	130	0	308
Syangja	81	98	0	179
Total	796	731	0	1,527

(%)

District	Girl(1)	Boy(2)	Others(3)	Total
Dailekh	50%	50%	0%	100%
Dhading	49%	51%	0%	100%
Kanchanpur	54%	46%	0%	100%
Kapilvastu	54%	46%	0%	100%
Sankhuwasabh	51%	49%	0%	100%
Saptari	58%	42%	0%	100%
Syangja	45%	55%	0%	100%
Total	52%	48%	0%	100%

Figure 1-3 Gender (Student)



(2) Age

The age reported by students is as follows. The most frequent response is “10 years or more” (52%). In Kanchanpur, 68% of students reported this choice.

Table 1-4 Age (Student)

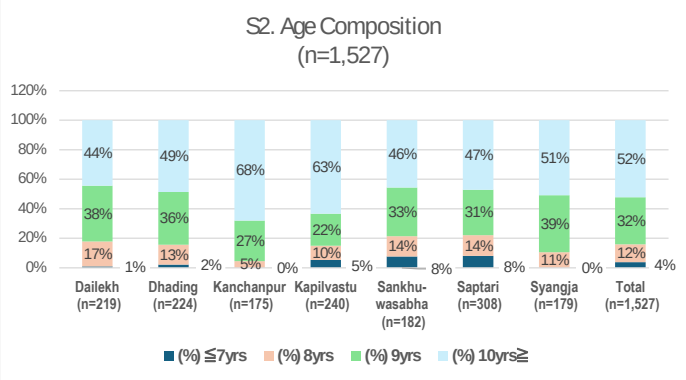
(n)

District	≦7yrs	8yrs	9yrs	10yrs≧	Total
Dailekh	2	37	83	97	219
Dhading	5	30	80	109	224
Kanchanpur	0	8	48	119	175
Kapilvastu	13	23	52	152	240
Sankhuwasabha	14	25	60	83	182
Saptari	25	43	95	145	308
Syangja	0	19	69	91	179
Total	59	185	487	796	1,527

(%)

District	≦7yrs	8yrs	9yrs	10yrs≧	Total
Dailekh	1%	17%	38%	44%	100%
Dhading	2%	13%	36%	49%	100%
Kanchanpur	0%	5%	27%	68%	100%
Kapilvastu	5%	10%	22%	63%	100%
Sankhu-	8%	14%	33%	46%	100%
Saptari	8%	14%	31%	47%	100%
Syangja	0%	11%	39%	51%	100%
Total	4%	12%	32%	52%	100%

Figure 1-4 Age (Student)



(3) Caste and Ethnicity

The caste and ethnicity reported by students are as follows. The highest ratio (overall) is Janaijatis (39%), with the second as Dalit (25%) and the third as B/C (21%). Composition in each District is truly various. Janaijatis is relatively dominant at Sankhuwasabha (75%) and at Dhading (64%).

Table 1-5 Caste and Ethnicity

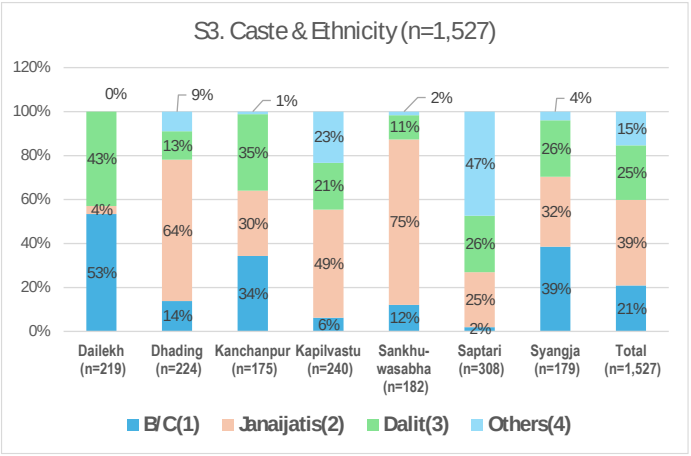
(n)

District	B/C(1)	Janaijatis(2)	Dalit(3)	Others(4)	Total
Dailekh	117	8	94	0	219
Dhading	31	144	29	20	224
Kanchanpur	60	52	61	2	175
Kapilvastu	15	118	51	56	240
Sankhuwasabha	22	137	20	3	182
Saptari	6	77	79	146	308
Syangja	69	57	46	7	179
Total	320	593	380	234	1,527

(%)

District	B/C(1)	Janaijatis(2)	Dalit(3)	Others(4)	Total
Dailekh	53%	4%	43%	0%	100%
Dhading	14%	64%	13%	9%	100%
Kanchanpur	34%	30%	35%	1%	100%
Kapilvastu	6%	49%	21%	23%	100%
Sankhu-	12%	75%	11%	2%	100%
Saptari	2%	25%	26%	47%	100%
Syangja	39%	32%	26%	4%	100%
Total	21%	39%	25%	15%	100%

Figure 1-5 Caste and Ethnicity



(4) Language

The responses to the question “What language does your family speak at home?” are as follows. The overall ratio using Nepali at home is just more than half, 56%, and others is 44%. The others include Tamang (n=56) in Dhading, Doteli (n=18) in Kanchanpur, Awadhi (n=190) in Kapilvastu, and Maithili (n=270) in Saptari.

Table 1-6 Language at Home

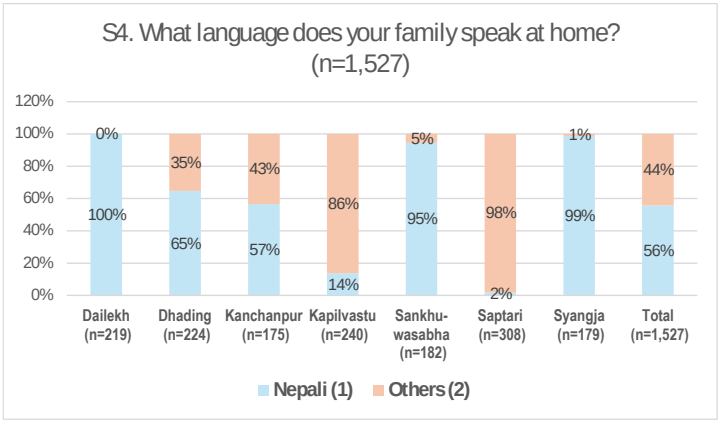
Figure 1-6 Language at Home

(n)

District	Nepali (1)	Others (2)	Total
Dailekh	219	0	219
Dhading	145	79	224
Kanchanpur	99	76	175
Kapilvastu	33	207	240
Sankhuwasabha	172	10	182
Saptari	6	302	308
Syangja	177	2	179
Total	851	676	1,527

(%)

District	Nepali (1)	Others (2)	Total
Dailekh	100%	0%	100%
Dhading	65%	35%	100%
Kanchanpur	57%	43%	100%
Kapilvastu	14%	86%	100%
Sankhu−	95%	5%	100%
Saptari	2%	98%	100%
Syangja	99%	1%	100%
Total (n=1,527)	56%	44%	100%



(5) Walking Time from Home to School

The responses to the question "Waking time from home to school" are as follows. The most frequent response overall is 0-15 minutes (49%). That response in Saptari is the highest (67%) among the seven districts.

Table 1-7 Walking Time from Home to School

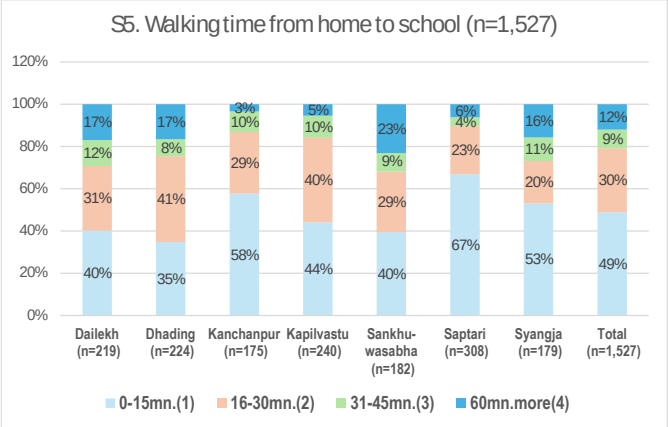
(n)

District	0-15mn.(1)	16-30mn.(2)	31-45mn.(3)	60mn.more(	Total
Dailekh	88	67	27	37	219
Dhading	78	91	18	37	224
Kanchanpur	101	51	17	6	175
Kapilvastu	106	96	25	13	240
Sankhuwasabha	72	52	16	42	182
Saptari	206	70	13	19	308
Syangja	95	36	20	28	179
Total	746	463	136	182	1,527

(%)

District	0-15mn.(1)	16-30mn.(2)	31-45mn.(3)	60mn.more(	Total
Dailekh	40%	31%	12%	17%	100%
Dhading	35%	41%	8%	17%	100%
Kanchanpur	58%	29%	10%	3%	100%
Kapilvastu	44%	40%	10%	5%	100%
Sankhu−	40%	29%	9%	23%	100%
Saptari	67%	23%	4%	6%	100%
Syangja	53%	20%	11%	16%	100%
Total	49%	30%	9%	12%	100%

Figure 1-7 Walking time from home to school



(b) Socio-Economic Status

(6) Household Work

The responses to the question "Do you sometimes miss school because of household work?" are as follows. The overall response for "yes" is 47%, and 53% is "no". The highest ratio of "yes" among the seven districts is Sankhuwasabha (80%).[6]

Table 1-8 Do you sometimes miss school because of household work?

Figure 1-8 Do you sometimes miss school because of household work?

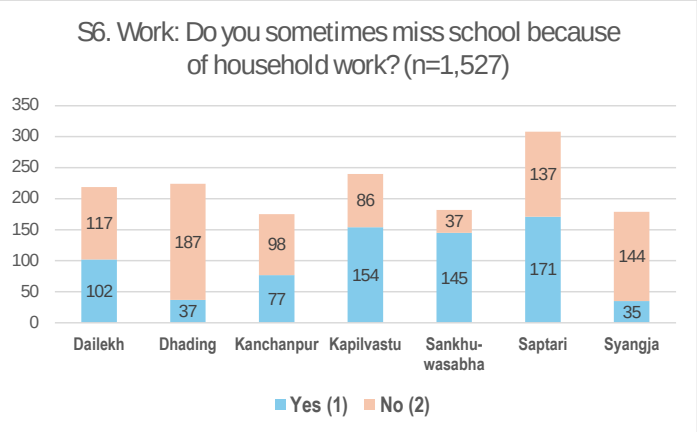
[6] This question was analyzed by gender. There were no statistically significant differences.

(n)

District	Yes (1)	No (2)	Total
Dailekh	102	117	219
Dhading	37	187	224
Kanchanpur	77	98	175
Kapilvastu	154	86	240
Sankhu-	145	37	182
Saptari	171	137	308
Syangja	35	144	179
Total	721	806	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	47%	53%	100%
Dhading	17%	83%	100%
Kanchanpur	44%	56%	100%
Kapilvastu	64%	36%	100%
Sankhuwasabh	80%	20%	100%
Saptari	56%	44%	100%
Syangja	20%	80%	100%
Total	47%	53%	100%



(7) Television (TV)

The responses to the question "Do you have a television at home?" are as follows. Nearly half of the students responded "yes" (47%). That response in Syangja is the highest (72%) among the seven districts. The lowest is Dailekh (16%).

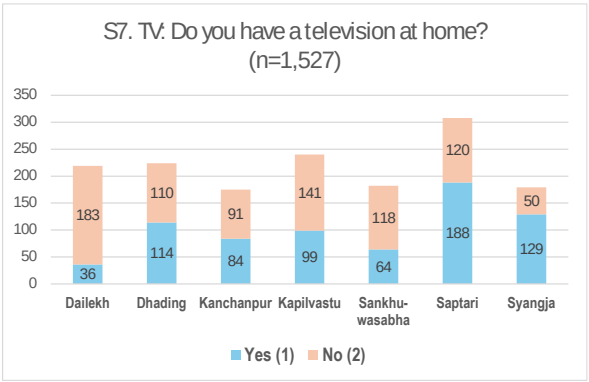
Table 1-9 Television at Home

District	Yes (1)	No (2)	Total
Dailekh	36	183	219
Dhading	114	110	224
Kanchanpur	84	91	175
Kapilvastu	99	141	240
Sankhu-	64	118	182
Saptari	188	120	308
Syangja	129	50	179
Total	714	813	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	16%	84%	100%
Dhading	51%	49%	100%
Kanchanpur	48%	52%	100%
Kapilvastu	41%	59%	100%
Sankhuwasabh	35%	65%	100%
Saptari	61%	39%	100%
Syangja	72%	28%	100%
Total	47%	53%	100%

Figure 1-9 Television at Home



(8) Motorbike

The responses to the question "Do you have a motorbike at home?" are as follows. Nearly one-third of students responded "yes" (29%). That response in Saptari is the highest (43%) among the seven districts. The lowest is Dailekh (11%).

Table 1-10 Motorbike at Home

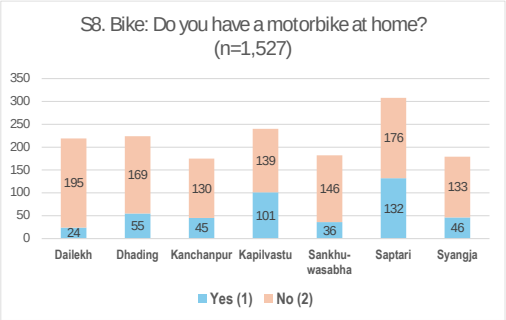
(n)

District	Yes (1)	No (2)	Total
Dailekh	24	195	219
Dhading	55	169	224
Kanchanpur	45	130	175
Kapilvastu	101	139	240
Sankhu-	36	146	182
Saptari	132	176	308
Syangja	46	133	179
Total	439	1,088	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	11%	89%	100%
Dhading	25%	75%	100%
Kanchanpur	26%	74%	100%
Kapilvastu	42%	58%	100%
Sankhuwas	20%	80%	100%
Saptari	43%	57%	100%
Syangja	26%	74%	100%
Total	29%	71%	100%

Figure 1-10 Motorbike at Home



(9) Smartphone

The responses to the question "Do you have a smartphone at home?" are as follows. Almost all students responded "yes" (84%). That response in Dailekh and Saptari is the highest (both are 89%) among the seven districts. The lowest is Kapilvastu (78%), although the difference among the seven Districts is not significant.

Table 1-11 Smartphone

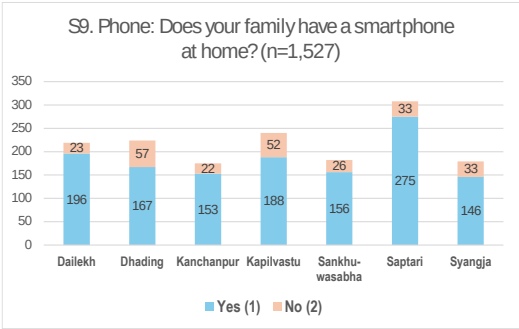
(n)

District	Yes (1)	No (2)	Total
Dailekh	196	23	219
Dhading	167	57	224
Kanchanpur	153	22	175
Kapilvastu	188	52	240
Sankhu-	156	26	182
Saptari	275	33	308
Syangja	146	33	179
Total	1,281	246	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	89%	11%	100%
Dhading	75%	25%	100%
Kanchanpur	87%	13%	100%
Kapilvastu	78%	22%	100%
Sankhuwas	86%	14%	100%
Saptari	89%	11%	100%
Syangja	82%	18%	100%
Total	84%	16%	100%

Figure 1-11 Smartphone



(c) Learning Materials

(10) Maths Workbook

The responses to the question "Do you have your maths workbook?" are as follows. Almost all students responded "yes" (87%). That response in Saptari is the highest (100%) among the seven districts. On the other hand, the students responded "yes" in Syangja responded only 22 %. The reason should be

examined.[7]

Table 1-12 Do you have your math workbook?

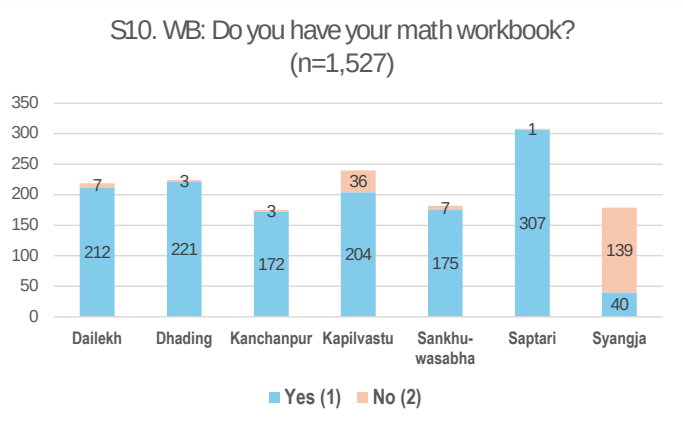
(n)

District	Yes (1)	No (2)	Total
Dailekh	212	7	219
Dhading	221	3	224
Kanchanpur	172	3	175
Kapilvastu	204	36	240
Sankhu-	175	7	182
Saptari	307	1	308
Syangja	40	139	179
Total	1,331	196	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	97%	3%	100%
Dhading	99%	1%	100%
Kanchanpur	98%	2%	100%
Kapilvastu	85%	15%	100%
Sankhuwasabh	96%	4%	100%
Saptari	100%	0%	100%
Syangja	22%	78%	100%
Total	87%	13%	100%

Figure 1-12 Do you have your math workbook?



(11) Self-learning Material

The responses to the question "Do you have your self-learning material on maths?" are as follows. Almost all students responded "no" (98%). That response in Syangja is the highest (7%), although it is still very low.

Table 1-13 Do you have your self-learning material on maths?

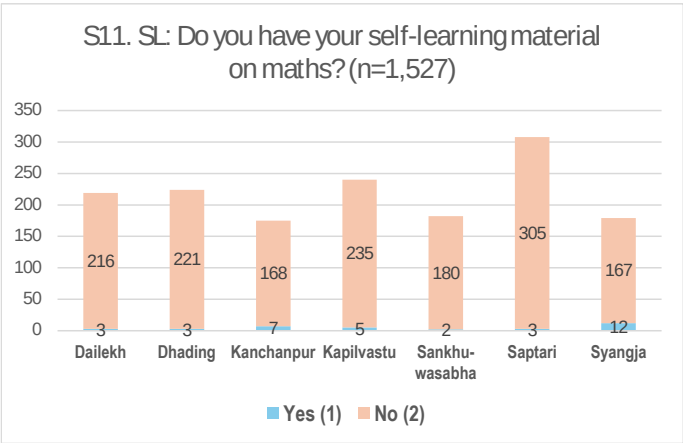
(n)

District	Yes (1)	No (2)	Total
Dailekh	3	216	219
Dhading	3	221	224
Kanchanpur	7	168	175
Kapilvastu	5	235	240
Sankhu-	2	180	182
Saptari	3	305	308
Syangja	12	167	179
Total	35	1,492	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	1%	99%	100%
Dhading	1%	99%	100%
Kanchanpur	4%	96%	100%
Kapilvastu	2%	98%	100%
Sankhuwasabh	1%	99%	100%
Saptari	1%	99%	100%
Syangja	7%	93%	100%
Total	2%	98%	100%

Figure 1-13 Do you have your self-learning material on maths?



(12) Homework at Home Regularly

The responses to the question "Do you do your homework regularly?" are as follows. Almost all students responded "yes" (94%). That response in Sankhuwasabha is the highest (98%) among the seven districts,

[7] Errors were identified in the responses of students using the English version of the CDC workbook. Therefore, this response by Syangja is incorrect. However, since it is not ethically correct to revise the data entered in a statistical survey, we leave this figure as it is. Estimates are that about 86% of students in Syangja have CDC workbooks.

and the lowest is Dailekh (88%), although the difference is just slight.

Table 1-14 Do you do your homework regularly?

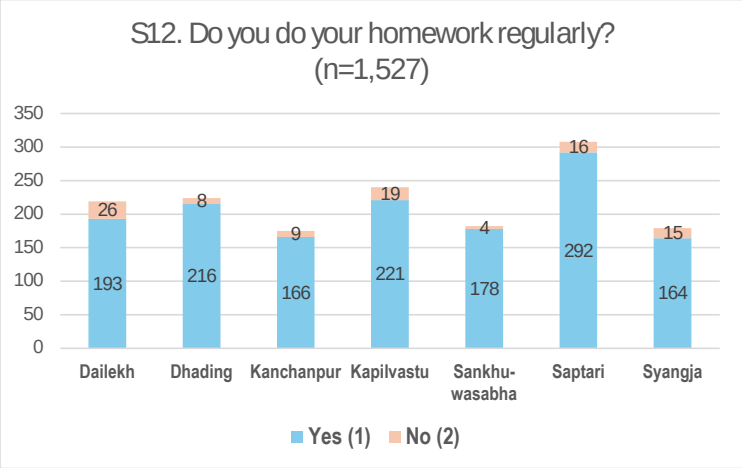
(n)

District	Yes (1)	No (2)	Total
Dailekh	193	26	219
Dhading	216	8	224
Kanchanpur	166	9	175
Kapilvastu	221	19	240
Sankhu-	178	4	182
Saptari	292	16	308
Syangja	164	15	179
Total	1,430	97	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	88%	12%	100%
Dhading	96%	4%	100%
Kanchanpur	95%	5%	100%
Kapilvastu	92%	8%	100%
Sankhuwas	98%	2%	100%
Saptari	95%	5%	100%
Syangja	92%	8%	100%
Total	94%	6%	100%

Figure 1-14 Do you do your homework regularly?



(13) Family Support at Home

The responses to the question "Does your family support your learning at home?" are as follows. Most students responded "Yes" (87%). That response in Sankhuwasabha is the highest (97%) and the lowest in Kapilvastu (67%). The reason for those differences should be examined.

Table 1-15 Do your family support your learning at home?

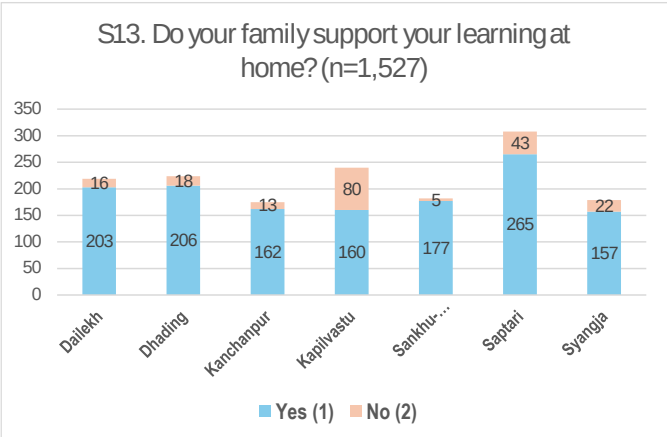
(n)

District	Yes (1)	No (2)	Total
Dailekh	203	16	219
Dhading	206	18	224
Kanchanpur	162	13	175
Kapilvastu	160	80	240
Sankhu-	177	5	182
Saptari	265	43	308
Syangja	157	22	179
Total	1,330	197	1,527

(%)

District	Yes (1)	No (2)	Total
Dailekh	93%	7%	100%
Dhading	92%	8%	100%
Kanchanpur	93%	7%	100%
Kapilvastu	67%	33%	100%
Sankhuwas	97%	3%	100%
Saptari	86%	14%	100%
Syangja	88%	12%	100%
Total	87%	13%	100%

Figure 1-15 Do your family support your learning at home?



(d) Learning Process

(14) Regular: You like to come to school regularly.

The responses to the question "**You like to come to school regularly**" are as follows. Most students

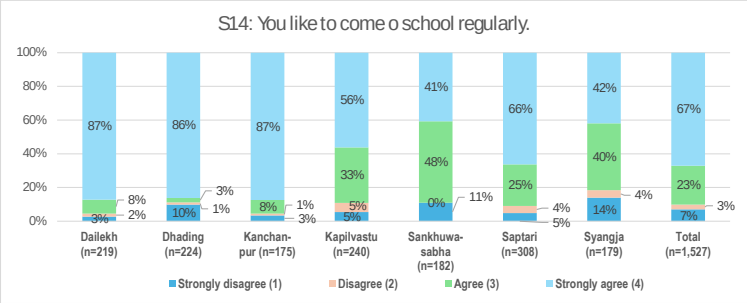
responded, “Strongly agree” (67%) or “agree” (23%), which total is more than 80%.[8]

Table 1-16 You like to come to school regularly

(n)	Strongly disagree(1)	Disagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	6	4	18	191	219
Dhading	22	3	6	193	224
Kanchanpur	6	2	14	153	175
Kapilvastu	13	13	79	135	240
Sankhuwasabha	20	0	88	74	182
Saptari	15	13	76	204	308
Syangja	25	8	71	75	179
Total	107	43	352	1,025	1,527

(%)	Strongly disagree (1)	Disagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	3%	2%	8%	87%	100%
Dhading	10%	1%	3%	86%	100%
Kanchanpur	3%	1%	8%	87%	100%
Kapilvastu	5%	5%	33%	56%	100%
Sankhuwasabha	11%	0%	48%	41%	100%
Saptari	5%	4%	25%	66%	100%
Syangja	14%	4%	40%	42%	100%
Total	7%	3%	23%	67%	100%

Figure 1-16 You like to come to school regularly



(15) Like: Which subject do you like most? (only one).

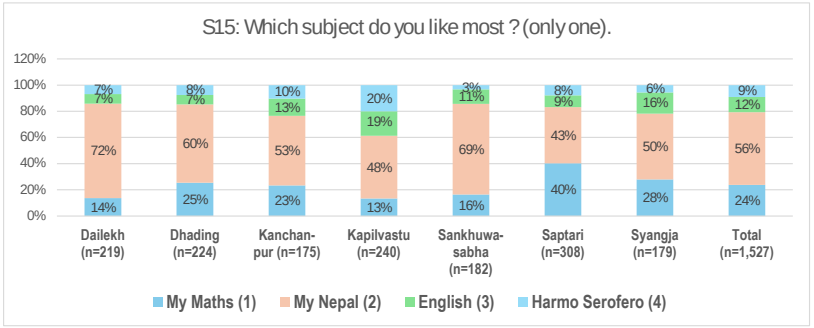
The responses to the question “Which subject do you like most? (only one).” are as follows. The most frequent response is “Mero Nepali” (56%), and the second is “My Mathematics” (24%). All Districts have the same order of responses.

Table 1-17 Which subject do you like most? (only one).

(n)	My Maths (1)	My Nepal (2)	English (3)	Harmo Serofero	Total
Dailekh	30	158	16	15	219
Dhading	57	134	16	17	224
Kanchanpur	41	93	23	18	175
Kapilvastu	32	115	45	48	240
Sankhuwasabha	30	126	20	6	182
Saptari	124	132	28	24	308
Syangja	50	90	29	10	179
Total	364	848	177	138	1,527

(%)	My Maths (1)	My Nepal (2)	English (3)	Harmo Serofero (4)	Total
Dailekh	14%	72%	7%	7%	100%
Dhading	25%	60%	7%	8%	100%
Kanchanpur	23%	53%	13%	10%	100%
Kapilvastu	13%	48%	19%	20%	100%
Sankhuwasabha	16%	69%	11%	3%	100%
Saptari	40%	43%	9%	8%	100%
Syangja	28%	50%	16%	6%	100%
Total	24%	56%	12%	9%	100%

Figure 1-17 Which subject do you like most? (only one).



[8] This question was analyzed by gender. There were no statistically significant differences.

(16) Difficult: Which subject is the most difficult for you to learn?" (only one)

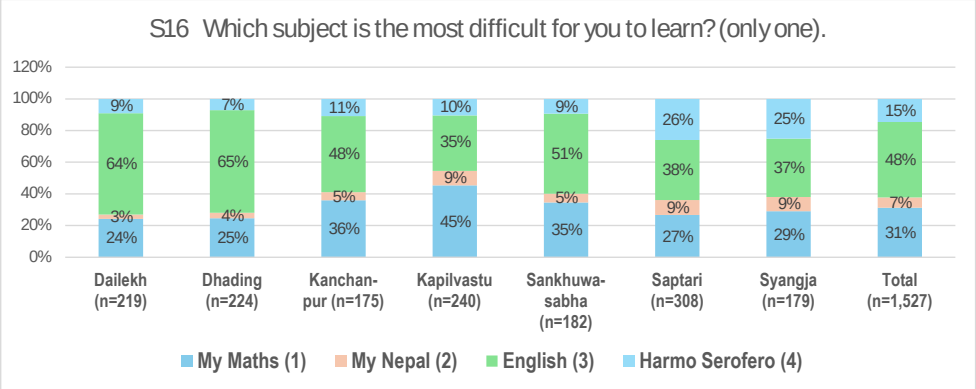
The responses to the question "**Which subject is the most difficult for you to learn?" (only one)** are as follows. The most frequent response is "English" (48%), and the second is "My Mathematics" (31%). All districts have the same order of responses, except Kapilvastu, where My Mathematics is the most difficult to learn.

Table 1-18 Which subject is the most difficult for you to learn?" (only one)

(n)	My Maths (1)	My Nepal (2)	English (3)	Harmo Serofero	Total
Dailekh	53	6	140	20	219
Dhading	55	8	145	16	224
Kanchanpur	63	9	84	19	175
Kapilvastu	109	22	84	25	240
Sankhuwasabha	63	10	92	17	182
Saptari	82	29	117	80	308
Syangja	52	16	66	45	179
Total	477	100	728	222	1,527

(%)	My Maths (1)	My Nepal (2)	English (3)	Harmo Serofero (4)	Total
Dailekh	24%	3%	64%	9%	100%
Dhading	25%	4%	65%	7%	100%
Kanchanpur	36%	5%	48%	11%	100%
Kapilvastu	45%	9%	35%	10%	100%
Sankhuwasabha	35%	5%	51%	9%	100%
Saptari	27%	9%	38%	26%	100%
Syangja	29%	9%	37%	25%	100%
Total	31%	7%	48%	15%	100%

Figure 1-18 Which subject is the most difficult for you to learn?" (only one)



(17) Active: You learn actively in maths lessons

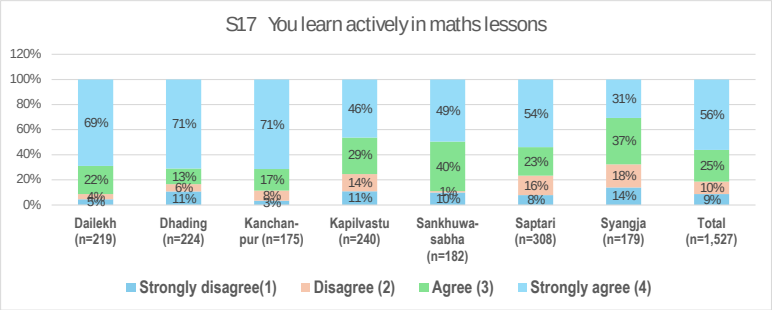
The responses to the question "You learn actively in maths lessons." are as follows. The most frequent response is "Strongly agree" (56%), and the second is "Agree" (25%). All Districts have the same order of responses.

Table 1-19 You learn actively in maths lessons.

(n)	Strongly disagree(1)	Disagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	10	9	49	151	219
Dhading	24	13	28	159	224
Kanchanpur	6	14	30	125	175
Kapilvastu	26	33	70	111	240
Sankhuwasabha	18	2	72	90	182
Saptari	24	48	70	166	308
Syangja	25	33	66	55	179
Total	133	152	385	857	1,527

(%)	Strongly disagree(1)	Disagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	5%	4%	22%	69%	100%
Dhading	11%	6%	13%	71%	100%
Kanchanpur	3%	8%	17%	71%	100%
Kapilvastu	11%	14%	29%	46%	100%
Sankhuwasabha	10%	1%	40%	49%	100%
Saptari	8%	16%	23%	54%	100%
Syangja	14%	18%	37%	31%	100%
Total	9%	10%	25%	56%	100%

Figure 1-19 You learn actively in maths lessons



(18) Group: How often do you participate in the pair/group work in Maths lessons?

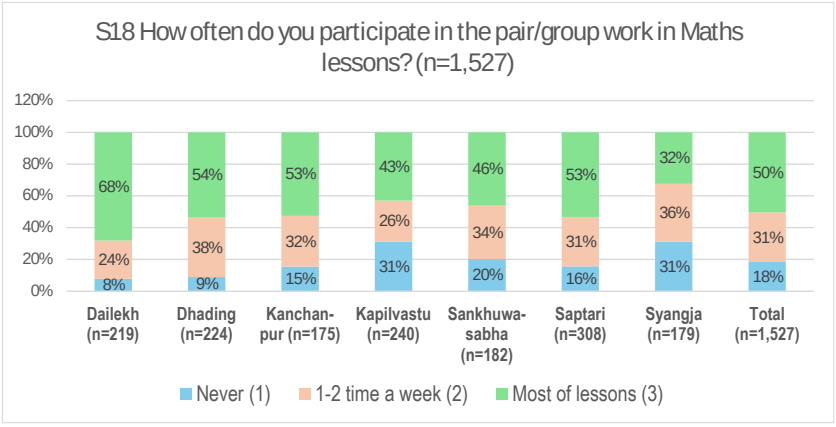
The responses to the question "How often do you participate in the pair/group work in Maths lessons?" are as follows. The most frequent response is "most of the lessons" (50%)[9], and the second is "1-2 times a week" (31%). All districts have the same order of responses, except Syangja, where "1-2 times a week" is the most frequent response (36%) and Kapilvastu, where "never" is the second most response (31%).

Table 1-20 How often do you participate in the pair/group work in Maths lessons?

(n)	Never (1)	1-2 time a week	Most of lessons (3)	Total
Dailekh	17	53	149	219
Dhading	20	84	120	224
Kanchanpur	27	56	92	175
Kapilvastu	75	62	103	240
Sankhuwasabha	37	61	84	182
Saptari	48	96	164	308
Syangja	56	65	58	179
Total	280	477	770	1,527

(%)	Never (1)	1-2 time a week	Most of lessons (3)	Total
Dailekh	8%	24%	68%	100%
Dhading	9%	38%	54%	100%
Kanchanpur	15%	32%	53%	100%
Kapilvastu	31%	26%	43%	100%
Sankhuwasabha	20%	34%	46%	100%
Saptari	16%	31%	53%	100%
Syangja	31%	36%	32%	100%
Total	18%	31%	50%	100%

Figure 2-20 How often do you participate in the pair/group work in Maths lessons?



1-2-3 Factorial Analysis of the Relationship between Test Results and Student's

[9] This number differs from the impression from the classroom observation. The reason for this is expected to be the difference between the teachers' interpretation of pair/group work and the observers' interpretation. The observer's interpretation of the case where a student is copying a neighbor's answer also assumes that the teacher sees it as pair/group work.

Responses

(a) Basic Information

(1) Gender (S1) x Average Test Score

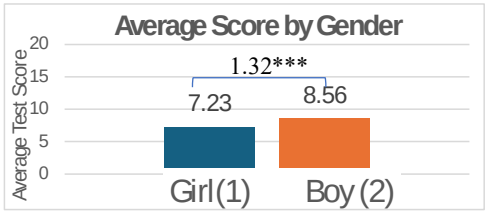
The average test score of girls is lower than that of boys (-1.32), which is statistically significant. It does not mean biological factors, but it should be understood that the factors of the study environment differ for each gender.

Table and Figure 1-21 Gender x Average Test Score

Basic information – S1 Gender

Group	n	Average	SD	SE	t	p	Star	Effect Size
Girl (1)	796	7.23	4.31	0.23	−5.76	0.000	***	−0.29
Boy (2)	731	8.56	4.67					Small~Med.
	1527	−1.32	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)

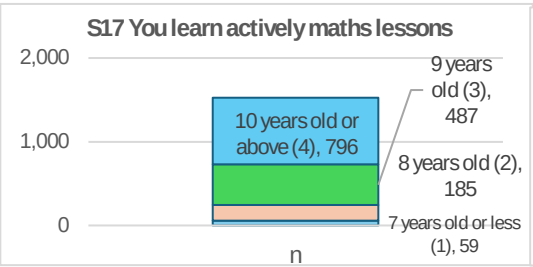


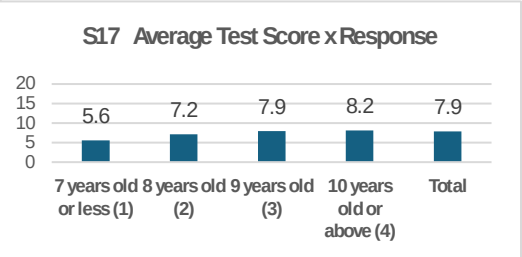
(2) Age (S2) x Average Test Score

The most frequent response is “10 years or above” (52%), and the second is “9 years old” (32%). Their total reaches 83%. The average maths test score of the “10 years or above” group is the highest, 8.2, and the second is “9 years old”, 7.9. The lowest is the “7 years old or less” group, 5.6[10]. A linear relationship between age and test score is observed.

Table and Figure 1-22 Age x Average Test Score

Response	n	(%)	Test – Average	Test – Std. dev.
7 years old or less (1)	59	4%	5.6	3.4
8 years old (2)	185	12%	7.2	4.6
9 years old (3)	487	32%	7.9	4.6
10 years old or above (4)	796	52%	8.2	4.5
Total	1,527	100%	7.9	4.5





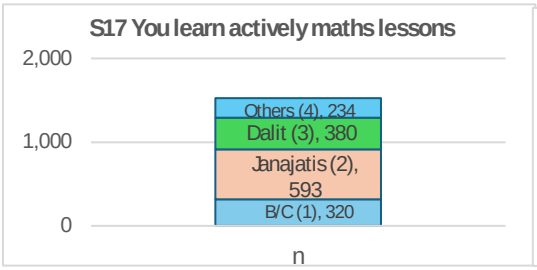
[10] Information is currently being gathered on the situation of having 7-year-olds or younger in the fourth grade. In Dhading's case, IBSE confirmed the fact that a 7-year-old student who transferred from a private school skipped a grade and entered the fourth grade. On the other hand, many surveyors speculated that the students may have filled out the form incorrectly.

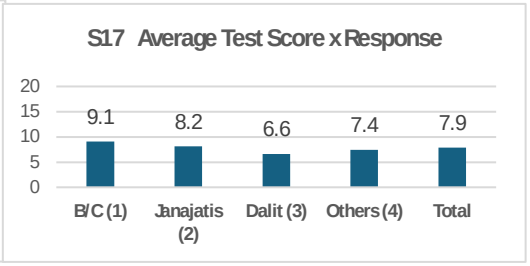
(3) Cast and Ethnicity (S3) x Average Test Score

The most frequent response is “Janajatis” (39%), the second is “Dalit” (25%), and the third is “B/C” (21%). The average math test score of “Janajatis” group is 8.2, “Dalit” group is 6.6, and “B/C” is 9.1. The other is 7.4. It should be understood that these average scores reflect the socio-economic conditions on which each group stands.

Table and Figure 1-23 Caste and Ethnicity x Average Test Score

Response	n	(%)	Test – Average	Test – Std. dev.
B/C (1)	320	21%	9.1	4.6
Janajatis (2)	593	39%	8.2	4.5
Dalit (3)	380	25%	6.6	4.1
Others (4)	234	15%	7.4	4.6
Total	1,527	100%	7.9	4.5





(4) Language (S4) x Average Test Score

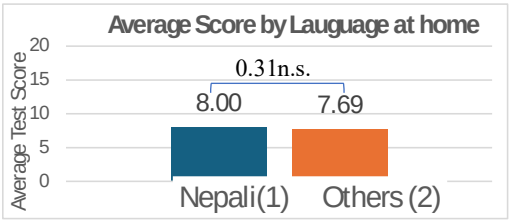
The average test score of the Nepali language at home is slightly higher than that of other languages but it is not statistically significant.

Table and Figure 1-24 Language x Average Test Score

Basic information – S4 What language oes your family speak at home?

Group	n	Average	SD	SE	t	p	Star	Effect Size
Nepali (1)	851	8.00	4.42	0.23	1.34	0.179	n.s.	0.07
Others (2)	676	7.69	4.66					Negligible
	1527	0.31	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)

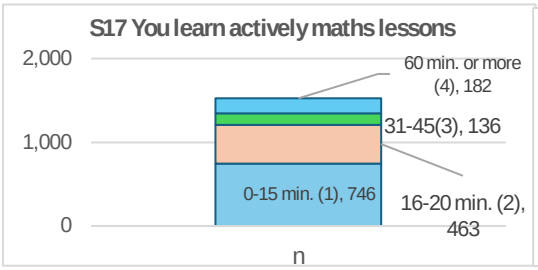


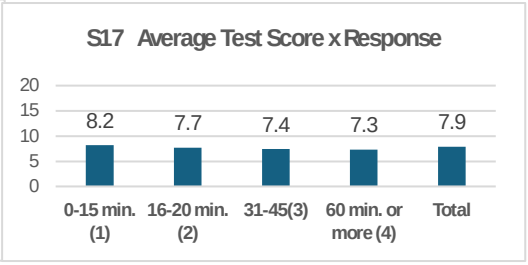
(5) Walking Time from Home to School (S5) x Average Test Score

The most frequent response is “0-15 min.” (49%), and the second is “16-20 min.” (30%). Their total reaches 79%. The average math test score of “16-20 min.” group” is the highest, 8.2, and the second is “16-20 min.”, 7.7. The lowest is the “60 min. or more” group, 7.3. Linear relation between walking time and the test score is observed.

Table and Figure 1-25 Walking Time x Average Test Score

Response	n	(%)	Test – Average	Test – Std. dev.
0–15 min. (1)	746	49%	8.2	4.7
16–20 min. (2)	463	30%	7.7	4.5
31–45(3)	136	9%	7.4	4.5
60 min. or more (4)	182	12%	7.3	4.2
Total	1,527	100%	7.9	4.5





(b) Socio-Economic Status

(6) "Do you miss school because of household work?" (S6) x Average Test Score

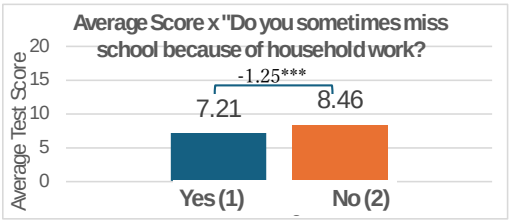
The average test score of the "Yes" group is slightly lower than that of the "No" group (-1.25), which is statistically significant.

Table and Figure 1-26 Language x "Do you miss school because of household work?"

Socio-economic status – S6 work

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	721	7.21	4.36	0.23	-5.43	0.000	***	-0.28
No (2)	806	8.46	4.60					Small~Mid.
	1527	-1.25	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(7) "Do you have a Television at home?" (S7) x Average Test Score

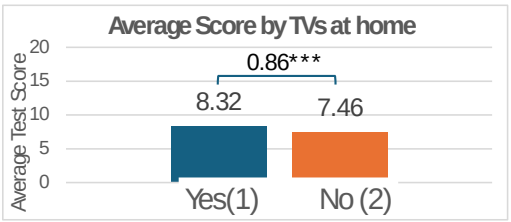
The average test score of the "Yes" group is higher than that of the "No" group (+0.86), which is statistically significant.

Table and Figure 1-27 "Do you have a Television at home?" x Average Test Score

Socio-economic status – S7 Do you have a television at home?

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	714	8.32	4.76	0.23	3.71	0.000	***	0.19
No (2)	813	7.46	4.29					Small~Mid.
	1527	0.86	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(8) "Do you have a Motorbike at home?" (S8) x Average Test Score

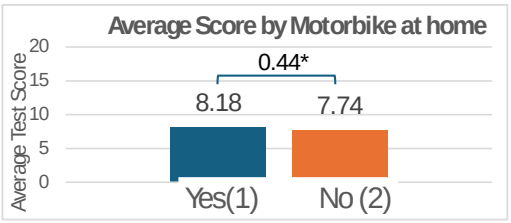
The average test score of the "Yes" group is slightly higher than that of the "No" group (+0.44) with a slightly statistically significant ($p<0.1$ (10%). One of the families has a motorbike.

Table and Figure 1-28 "Do you have a motorbike at home?" x Average Test Score

Socio-economic status – S8 Do you have a Motorbike at home?

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	439	8.18	4.74	0.26	1.71	0.088	*	0.10
No (2)	1,088	7.74	4.44					Small
	1527	0.44	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(9) "Does your family have a Smartphone?" (S9) x Average Test Score

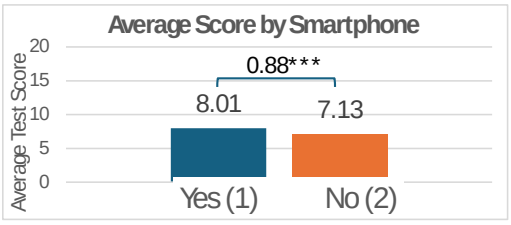
The average test score of the "Yes" group is slightly higher than that of the "No" group (+0.88), which is statistically significant. Three-fourths of families have a smartphone.

Table and Figure 1-29 "Does your family have a Smartphone?" x Average Test Score

Socio-economic status – S9 Does your family have a Smartphone?

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	1,281	8.01	4.52	0.31	2.80	0.005	***	0.19
No (2)	246	7.13	4.52					Small~Med.
	1527	0.88	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(c) Learning Materials

(10) "Do you have your maths workbook?" (S10) x Average Test Score

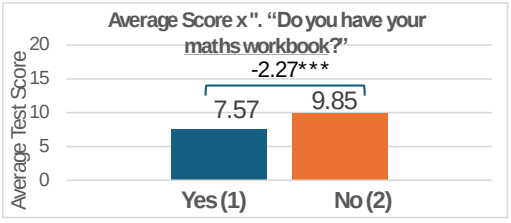
The average test score of the "Yes" group is largely lower than that of the "No" group (-2.27), which is statistically significant. Nearly 90 % (=87.2%) of students have their own maths workbook. Sample sizes are not balanced. This result is contradicted with our assumption and the reason should be examined. The reason is examined after the multiple regression analysis at the end of this report.

Table and Figure 1-30 "Do you have your maths workbook?" x Average test score

Learning materials – S10 Math Workbook

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	1331	7.57	4.38	0.34	−6.65	0.000	***	−0.50
No (2)	196	9.85	5.07					Mid.~Large
	1527	−2.27	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(11) "Do you have your self-learning materials on maths?"(S11) x Average Test Score

The average test score of the "Yes" group is slightly higher than that of the "No" group, but it is not statistically significant. Sample sizes are not balanced because only 2.3% of students have self-materials in maths.

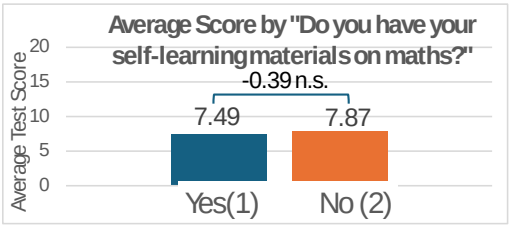
Table and Figure 1-31 "Do you have your self-learning materials on maths?"x Average Test Score

Learning materials – S11 Self-learning materia on maths

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	35	7.49	4.55	0.78	−0.50	0.616	**n.s.**	−0.09
No (2)	1492	7.87	4.53					Negligible
	1527	−0.39	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; **n.s. Not Significance**

Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(d) Learning at Home

(12) "Do you do your homework regularly?" (S12) x Average Test Score

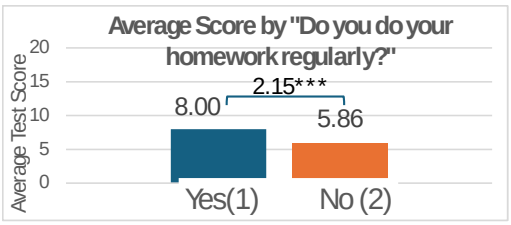
The average test score of the "Yes" group is largely higher than that of the "No" group +2.15), which is statistically significant. Over 90 % (=93.6%) of students do their homework regularly, so the sample sizes are not balanced.

Table and Figure 1-32 "Do you do your homework regularly?" x Average Test Score

Learning at home – S12 Do you do your homework regularly?

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	1,430	8.00	4.52	0.47	4.54	0.000	***	0.47
No (2)	97	5.86	4.41					Large
	1527	2.15	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(13) "Do your family support your learning at home?" (S13) x Average Test Score

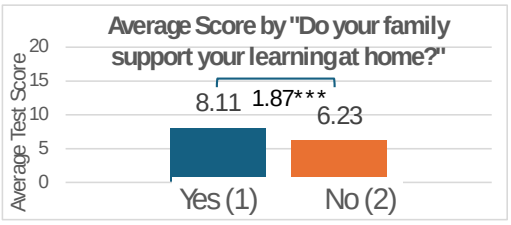
The average test score of the "Yes" group is higher than that of the "No" group (+1.87), which is statistically significant. Nearly 90 % (=87.1%) of students have family support for learning at home, so the sample sizes are not balanced.

Table and Figure 1-33 "Do your family support your learning at home?" x Average Test Score

Learning materials – S13 Do your family support your learning at home?

Group	n	Average	SD	SE	t	p	Star	Effect Size
Yes (1)	1,330	8.11	4.51	0.34	5.47	0.005	***	0.41
No (2)	197	6.23	4.33					Medium
	1527	1.87	4.53					
	↑ Total	↑ Diff.	↑ Comb.SD					

Star (Significance level): ***1%; **5%; * 10%; n.s. Not Significance
Effect size: Small 0.2; Medium 0.5, Large 0.8 (Cohen, 1988)
Small 0.1; Medium 0.2–0.3, Large 0.5 (Sasaki & Evans 2024)



(e) Learning Process

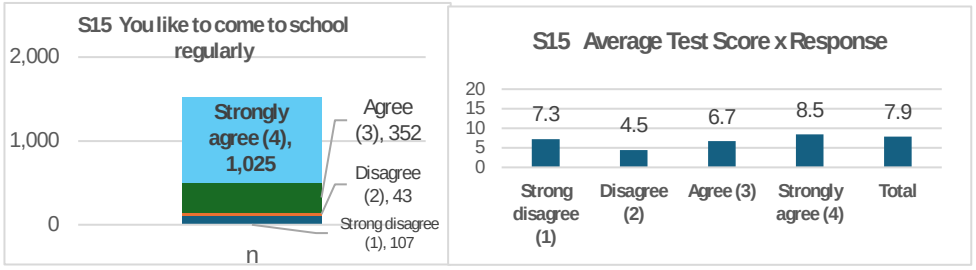
(14) "Do you come to school regularly?" (S14) x Average Test Score[11]

The most frequent response is "strongly agree" (67%), and the second is "agree" (23%), and their total reaches 90%. The average test score of the "strongly agree" group is the highest, 8.5, but the second is "strongly disagree," 7.3. The reason for explaining this result should be examined.

[11] Analysis by gender shows no statistically significant differences.

Table and Figure 1-34 "Do you come to school regularly?" x Average Test Score

Response	n	(%)	Test – Average	Test – Std. dev.
Strong disagree (1)	107	7%	7.3	4.7
Disagree (2)	43	3%	4.5	3.9
Agree (3)	352	23%	6.7	4.3
Strongly agree (4)	1,025	67%	8.5	4.5
Total	1,527	100%	7.9	4.5

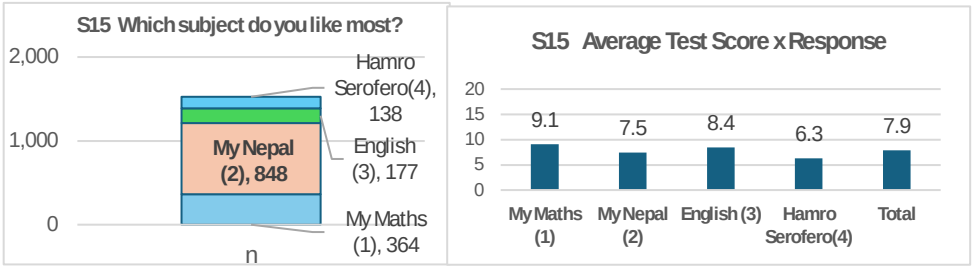


(15) "Which subject do you like most? (only one)" (S15) x Average Math Test Score

The most frequent response is “Mero Nepali” (56%), and the second is “My Mathematics” (24%). The average math test score of the “My Mathematics” group is the highest, 9.1, and the second is “English”, 8.4. The lowest is the “Hamro Serofero” group, 6.3.

Table and Figure 1-35 " Which subject do you like most?" x Average Test Score

Response	n	(%)	Test – Average	Test – Std. dev.
My Maths (1)	364	24%	9.1	5.0
My Nepal (2)	848	56%	7.5	4.2
English (3)	177	12%	8.4	4.6
Hamro Serofero(4)	138	9%	6.3	4.6
Total	1,527	100%	7.9	4.5

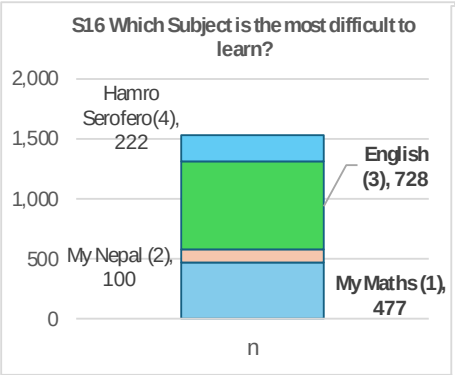


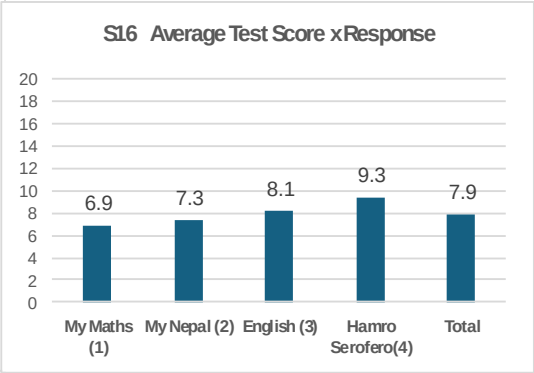
(16) "Which subject is the most difficult for you to learn? (only one)" (S16) x Average Math Test Score

The most frequent response is “English” (48%), and the second is “My Mathematics” (31%). The average math test score of the “Hamro Serofero” group is the highest, 9.3, and the second is “English,” 8.1. The lowest is the “My Mathematics” group, 6.9.

Table and Figure 1-36 " Which subject is the most difficult for you to learn?" x Average Test Score

Response	n	(%)	Test - Average	Test - Std. dev.
My Maths (1)	477	31%	6.9	4.3
My Nepal (2)	100	7%	7.3	4.6
English (3)	728	48%	8.1	4.4
Hamro Serofero(4)	222	15%	9.3	5.1
Total	1,527	100%	7.9	4.5



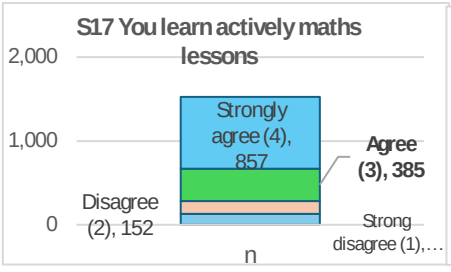


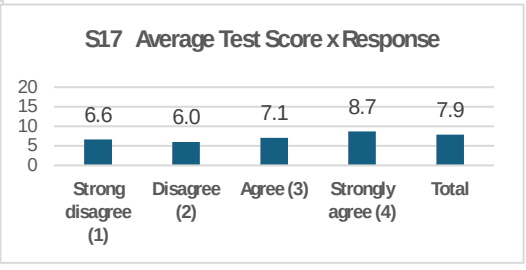
(17) "You learn actively maths lessons" (S17) x Average Maths Test Score

The most frequent response is “Strongly agree” (56%), and the second is “Agree” (25%). Their total reaches 81%. The average maths test score of the “Strongly agree” group is the highest, 8.7, and the second is “Agree,” 7.1. The lowest is the “Disagree” group, 6.0.[12]

Table and Figure 1-37 "You learn actively maths lessons" x Average Test Score

Response	n	(%)	Test – Average	Test – Std. dev.
Strong disagree (1)	133	9%	6.6	4.3
Disagree (2)	152	10%	6.0	4.5
Agree (3)	385	25%	7.1	4.4
Strongly agree (4)	857	56%	8.7	4.4
Total	1,527	100%	7.9	4.5





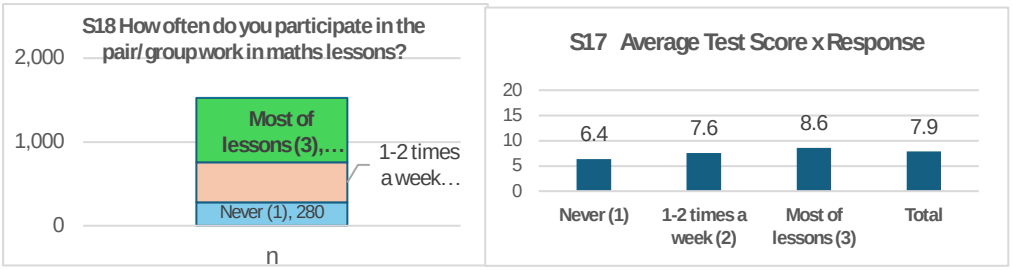
(18) "How often do you participate in the pair/group work in maths lessons" (S18) x Average Math Test Score

[12] This question was analyzed by gender. There were no statistically significant differences.

The most frequent response is “Most of the lessons” (50%), and the second is “1-2 times a week” (31%). The average maths test score of the “Most of the lessons” group is the highest, 8.6, and the lowest is the “Never” group, 6.4.

Table and Figure 1-38 " How often do you participate in the pair/group work in maths lessons " x Average Test Score

Response	n	(%)	Test – Average	Test – Std. dev.
Never (1)	280	18%	6.4	4.3
1–2 times a week (2)	477	31%	7.6	4.4
Most of lessons (3)	770	50%	8.6	4.5
Total	1,527	100%	7.9	4.5



1-2-4 Multiple Regression (Tentative, before interventions)

As the final analysis, multiple regression analysis is conducted. In order to control the difference in the situation between districts, the following coding matrix is developed and included in the regression analysis. Saptari district is set as the standard because the sample size is the largest among the seven districts, so it would be most stable.

Table 1-39 District Code Matrix

District name	Dst1	Dst2	Dst3	Dst4	Dst5	Dst6	Dst7
Dailekh	1	0	0	0	0	0	0
Dhading	0	1	0	0	0	0	0
Kanchanpur	0	0	1	0	0	0	0
Kapilvastu	0	0	0	1	0	0	0
Sankhuwasabha	0	0	0	0	1	0	0
Saptari	0	0	0	0	0	0	0
Syangja	0	0	0	0	0	0	1

(Source) IBSE team

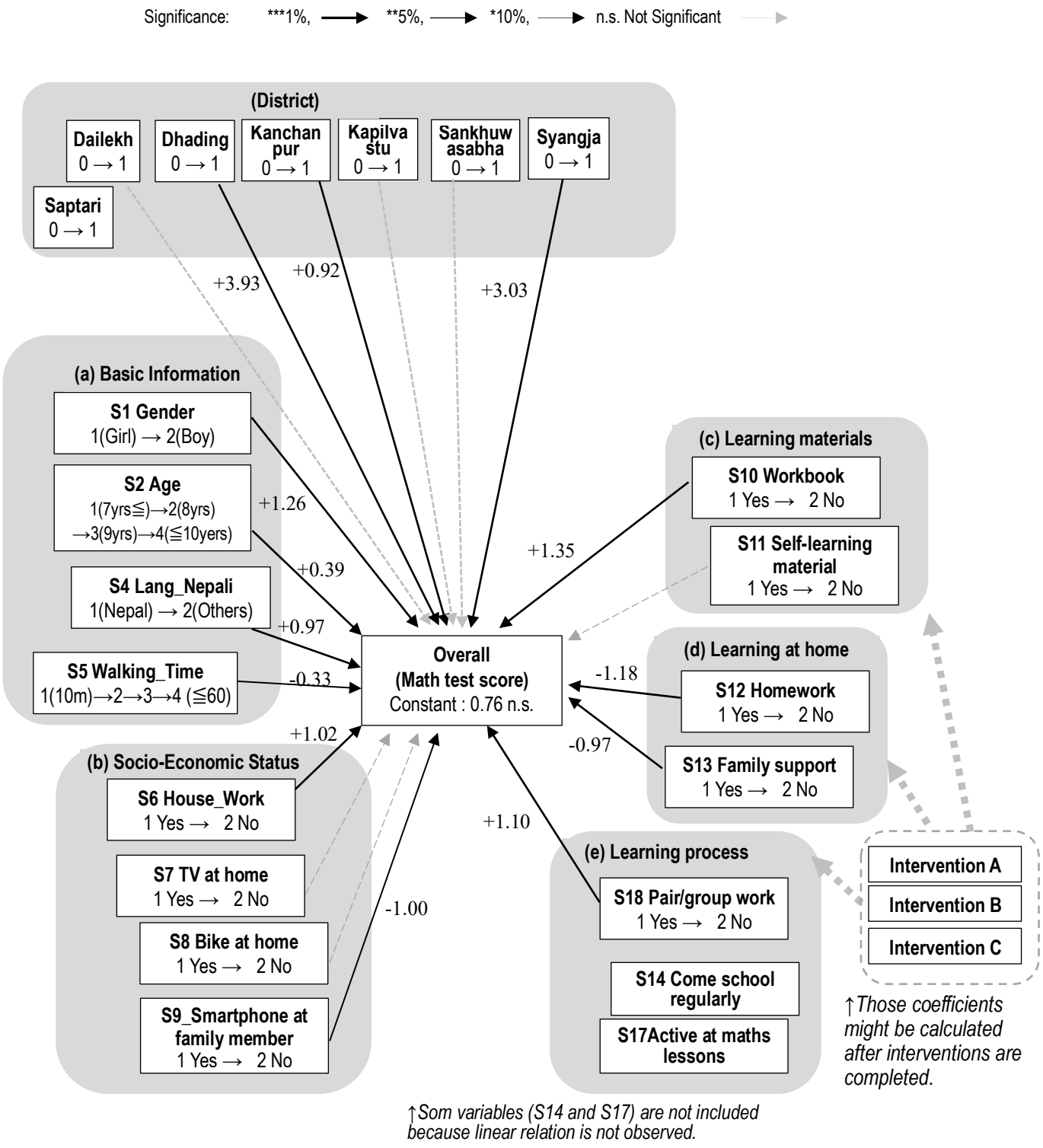
The results of our factorial analysis are confirmed in section 2-2-3, Factorial Analysis. As has remained, the coefficient of “S10 Workbook” contradicted our expectation (The math test score will increase by +1.35 if the response is changed from 1 Yes to 2 No).

Table 1-40 Multiple Regression Analysis (Tentative, before interventions)

Dependent Variable (i.e., Y) : Overall (Math test score)		n=1,527. R2=0.2282, F=23.45 (p<0.001)				
↓Explanatory Variable (i.e., X)	Response choices	Coefficient	Std. err.	t	p	Star
District Name 1	0→1Dailekh	−0.25	0.52	−0.48	0.630	n.s.
District Name 2	0→1Dhading	3.93	0.43	9.11	0.000	***
District Name 3	0→1Kanchanpur	0.92	0.43	2.12	0.034	**
District Name 4	0→1Kapilvastu	0.05	0.37	0.13	0.896	n.s.
District Name 5	0→1Sankhuwasabha	1.09	0.51	2.13	0.034	n.s.
District Name 6	0→1Saptari	0.00 (omitted)				–
District Name 7	0→1Syangja	3.30	0.61	5.37	0.000	***
S_1_Gender	1(Girl) → 2(Boy)	1.26	0.21	6.02	0.000	***
S_2_Age	1(7yrs≦)→2→3→4(≦10yers)	0.39	0.13	3.05	0.002	***
S_4_Lang_Nepali	1(Nepal) → 2(Others)	0.97	0.34	2.82	0.005	***
S_5_Walking_Time	1(10min)→2→3→4 (≦60 min)	−0.33	0.10	−3.14	0.002	***
S_6_House_Work	1 Yes → 2 No	0.26	0.23	1.16	0.248	n.s.
S_7_TV at home	1 Yes → 2 No	−0.15	0.23	−0.67	0.500	n.s.
S_8_Bike at home	1 Yes → 2 No	−0.23	0.24	−0.95	0.341	n.s.
S_9_Smartphone at family member	1 Yes → 2 No	−1.00	0.29	−3.5	0.000	***
S_10_Workbook	1 Yes → 2 No	1.35	0.44	3.04	0.002	***
S_11_Self-leaning Material	1 Yes → 2 No	1.14	0.69	1.65	0.100	n.s.
S_12_HomeWork	1 Yes → 2 No	−1.18	0.44	−2.71	0.007	***
S_13_Family support	1 Yes → 2 No	−0.97	0.33	−2.92	0.004	***
S_18_Pair/group work	1(Never) → 2 → 3(Most)	1.10	0.14	7.67	0.000	***
Constant		0.15	1.91	0.08	0.936	n.s.

Note1: Significance level : ***1%, **5%, *10%, n.s. Not Significant.
Note2: Categorical variables (e.g., Caste or ethnicity, subject names) are not included in this regression analysis.
Note3: Some questions (S14 and S17) are not included because linear relation is not observed.
(Source) JICA TC team.

Figure 1-39 Multiple Regression Analysis (Tentative, before interventions)[13]



n=1,527. R2=0.2282, F=23.45 (p<0.001)

[13] Errors were identified in the responses of students using the English version of the CDC workbook in Syangja. Therefore, this response by Syangja is incorrect. Estimates are that about 86% of students have CDC workbooks. Therefore, the "S10 Workbook" coefficient is incorrect. Excluding the Syangja data, regression analysis shows that the coefficient on Workbook utilization is not significant.

The following is the number of samples of "Yes/No" in math workbooks. Apparently, Syangja has an exceptional ratio. However, in Syangja, the data came out because many students using English CDC workbooks responded that they did not use CDC workbooks because their English cover page of the CDC workbook was different from the picture in the Nepali CDC workbook which was shown in the questionnaire.

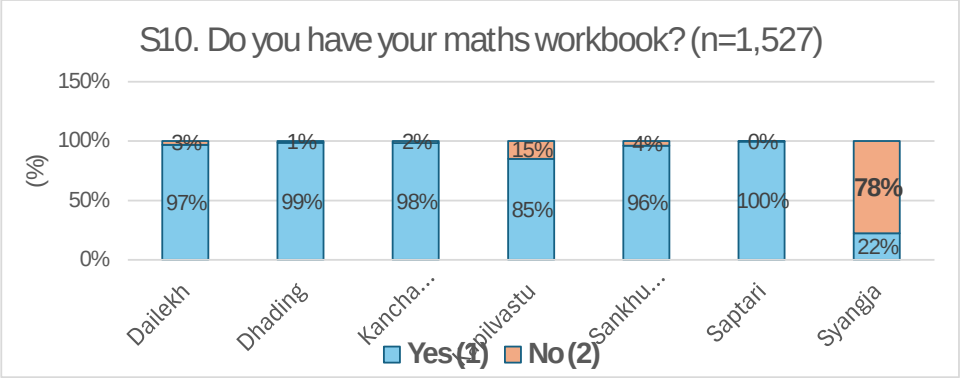
Table 1-41 and Figure 1-40 Do you have your maths workbook?

(n)

District name	Yes (1)	No (2)	Total
Dailekh	212	7	219
Dhading	221	3	224
Kanchanpur	172	3	175
Kapilvastu	204	36	240
Sankhuwasabha	175	7	182
Saptari	307	1	308
Syangja	40	139	179
Total	1331	196	1527

(%)

District name	Yes (1)	No (2)	Total
Dailekh	97%	3%	100%
Dhading	99%	1%	100%
Kanchanpur	98%	2%	100%
Kapilvastu	85%	15%	100%
Sankhuwa	96%	4%	100%
Saptari	100%	0%	100%
Syangja	22%	78%	100%
Total	87%	13%	100%



1-3 Teacher Questionnaire

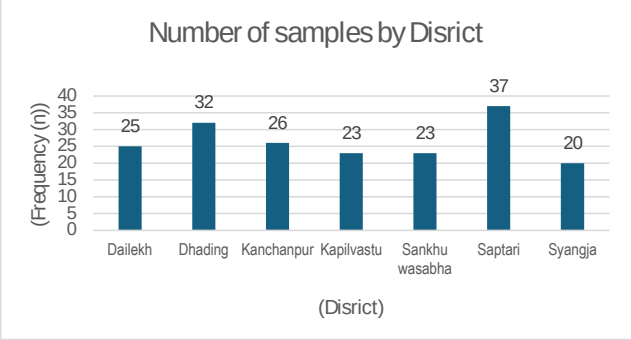
1-3-1 Sample of Teachers by Districts (National, District, and Gender-wise)

The samples of teachers for this baseline report are as follows. The total number is 186. Saptari has the largest number (n=37), and the smallest is Syangja (n=20). However, the sample size is relatively well-balanced over the seven districts.

Table 1-42 Sample by District

District	n	%
Dailekh	25	13%
Dhading	32	17%
Kanchanpur	26	14%
Kapilvastu	23	12%
Sankhuwasabha	23	12%
Saptari	37	20%
Syangja	20	11%
Total	186	100%

Figure 1-41 Sample by District



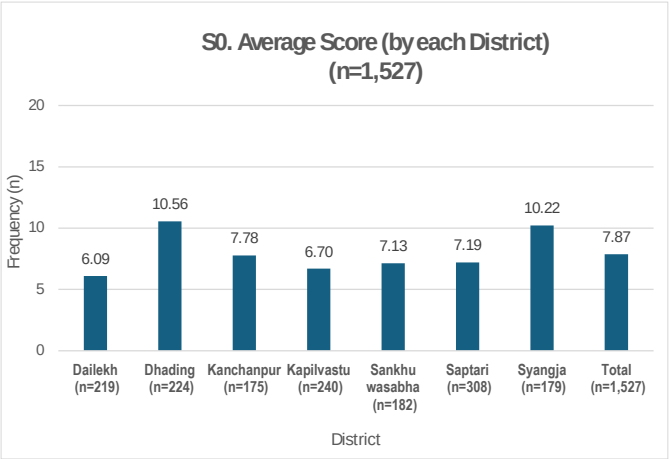
1-3-2 Average Test Score (Math)

Although this information has already been reported in the student baseline report, it is again included in this teacher baseline report for reference. The average test scores of students by district are as follows. The overall average is 7.87 (The full mark point is 20 points). The highest scores are Dhading (10.56) and Syangja (10.22). The lowest score is Dailekh (6.09). The standard deviation (overall) is 4.53.

Table 1-43 Test Score by District

District Name	Obs	Mean	Std.	Min	Max
Dailekh	219	6.09	3.37	0	18
Dhading	224	10.56	4.26	1	21
Kanchanpur	175	7.78	4.02	0	20
Kapilvastu	240	6.70	4.74	0	19
Sankhuwasabha	182	7.13	3.98	0	18
Saptari	308	7.19	4.31	0	19
Syangja	179	10.22	4.87	2	20
Total	1527	7.87	4.53	0	21

Figure 1-42 Average Test Score by District



1-3-3 Data for Questionnaire for 7 Districts (National, District, and Gender-wise)

(a) Basic Information
(1) Gender (Teacher) (T1)

The genders reported by teachers are as follows: the overall ratio of females to males is 52% to 48%. The district with the highest ratio of female teachers is Dhading, at 63%.

Table 1-44 Gender (Teacher)

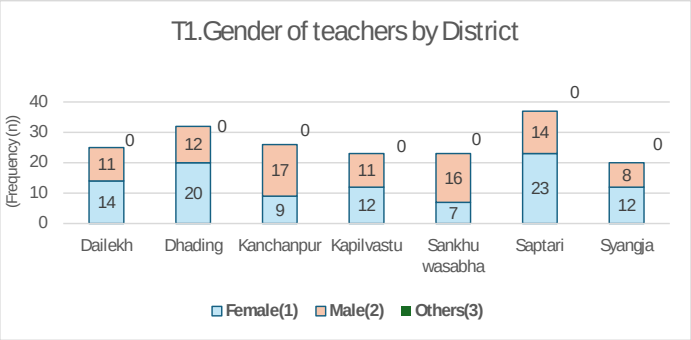
(n)

District	Female(1	Male(2)	Others(3)	Total
Dailekh	14	11	0	25
Dhading	20	12	0	32
Kanchanpur	9	17	0	26
Kapilvastu	12	11	0	23
Sankhuwasabha	7	16	0	23
Saptari	23	14	0	37
Syangja	12	8	0	20
Total	97	89	0	186

(%)

District	Female(1	Male(2)	Others(3)	Total
Dailekh	56%	44%	0%	100%
Dhading	63%	38%	0%	100%
Kanchanpur	35%	65%	0%	100%
Kapilvastu	52%	48%	0%	100%
Sankhu	30%	70%	0%	100%
Saptari	62%	38%	0%	100%
Syangja	60%	40%	0%	100%
Total	52%	48%	0%	100%

Figure 1-43 Gender (Teacher)



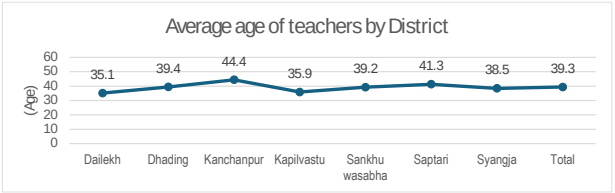
(2) Age (Teacher) (T2)

The age reported by teachers is as follows. The average age of the overall sample teachers is 39.3. Kanchanpur has the highest average (44.4).

Table 1-45 Age (Teacher)

District	Average	Std. dev.	n
Dailekh	35.1	7.0	25
Dhading	39.4	8.1	32
Kanchanpur	44.4	9.0	26
Kapilvastu	35.9	11.7	23
Sankhuwasabha	39.2	11.3	23
Saptari	41.3	10.5	37
Syangja	38.5	11.5	20
Total	39.3	10.2	186

Figure 1-44 Age (Teacher)



(3) Caste and Ethnicity (Teacher) (T3)

The caste and ethnicity reported by teachers are as follows. The highest ratio (overall) is B/C (51%), with the second as Janajatis (34%). Dalit only 6%. The composition in each District is varied. This composition is truly different from that of students in each district.

Table 1-46 Caste and Ethnicity

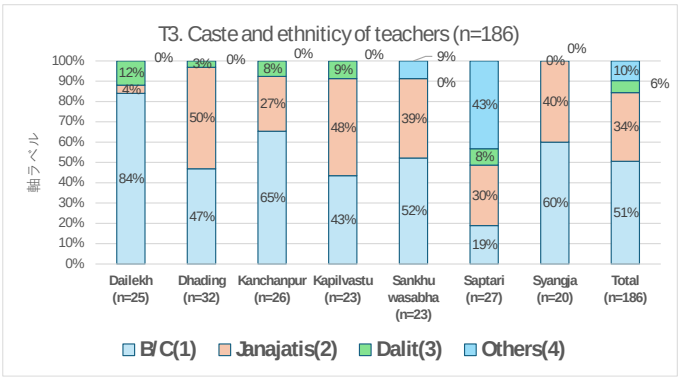
(n)

District	B/C(1)	Janajatis(2)	Dalit(3)	Others(4)	Total
Dailekh	21	1	3	0	25
Dhading	15	16	1	0	32
Kanchanpur	17	7	2	0	26
Kapilvastu	10	11	2	0	23
Sankhuwasabh	12	9	0	2	23
Saptari	7	11	3	16	37
Syangja	12	8	0	0	20
Total	94	63	11	18	186

(%)

District	B/C(1)	Janajatis(2)	Dalit(3)	Others(4)	Total
Dailekh	84%	4%	12%	0%	100%
Dhading	47%	50%	3%	0%	100%
Kanchanpur	65%	27%	8%	0%	100%
Kapilvastu	43%	48%	9%	0%	100%
Sankhuwasabh	52%	39%	0%	9%	100%
Saptari	19%	30%	8%	43%	100%
Syangja	60%	40%	0%	0%	100%
Total	51%	34%	6%	10%	100%

Figure 1-45 Caste and Ethnicity



(4) Qualification (T4)

The qualifications of teachers are as follows. “+2/equivalent” is the highest (55%), and the second is “Bachelor” (36%). The highest “Bachelor” ratio is Dailekh (60%), and the lowest is Dhading (22%).

Table 1-47 Qualification

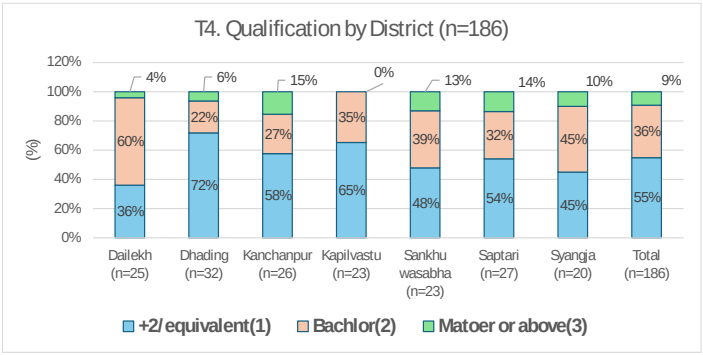
(n)

District	+2/equivalent(1)	Bachlor(2)	Matoer or above(3)	Total
Dailekh	9	15	1	25
Dhading	23	7	2	32
Kanchanpur	15	7	4	26
Kapilvastu	15	8	0	23
Sankhuwasabh	11	9	3	23
Saptari	20	12	5	37
Syangja	9	9	2	20
Total	102	67	17	186

(%)

District	+2/equivalent(1)	Bachlor(2)	Matoer or above(3)	Total
Dailekh	36%	60%	4%	100%
Dhading	72%	22%	6%	100%
Kanchanpur	58%	27%	15%	100%
Kapilvastu	65%	35%	0%	100%
Sankhuwasabh	48%	39%	13%	100%
Saptari	54%	32%	14%	100%
Syangja	45%	45%	10%	100%
Total	55%	36%	9%	100%

Figure 1-46 Qualification



(5) Language (T5)

The mother languages are as follows. The overall ratio of Nepali is 60%. Dailekh has the lowest ratio of Nepali as the mother language (38%), and Dhading (77%) is the highest.

Table 1-48 Mother Language

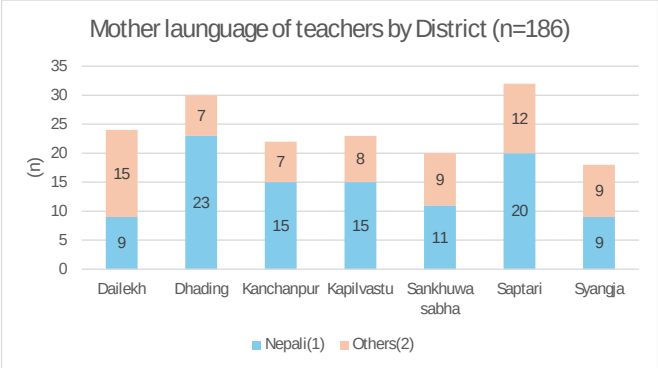
(n)

District	Nepali(1)	Others(2)	Total
Dailekh	9	15	24
Dhading	23	7	30
Kanchanpur	15	7	22
Kapilvastu	15	8	23
Sankhuwa	11	9	20
Saptari	20	12	32
Syangja	9	9	18
Total	102	67	169

(%)

District	Nepali(1)	Others(2)	Total
Dailekh	38%	63%	100%
Dhading	77%	23%	100%
Kanchanpur	68%	32%	100%
Kapilvastu	65%	35%	100%
Sankhuwasabh	55%	45%	100%
Saptari	63%	38%	100%
Syangja	50%	50%	100%
Total	60%	40%	100%

Figure 1-47 Mother Language



(6) Type of Appointment (T6)

The types of teacher appointments are as follows: “Permanent” is 40% and “Temporary” is 22%. The rest, whose definitions are various, is 38%.[14]

Table 1-49 Type of Appointment

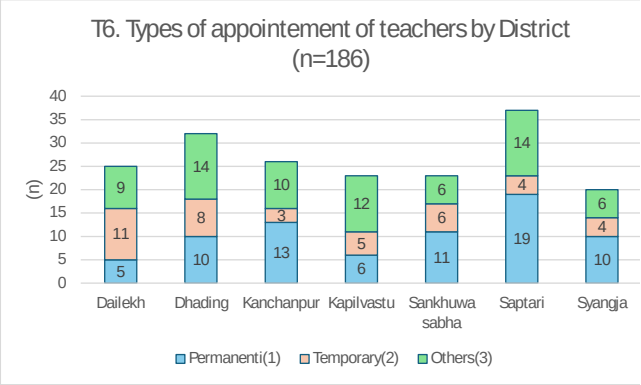
(n)

District	Permanenti(1)	Temporary(2)	Others(3)	Total
Dailekh	5	11	9	
Dhading	10	8	14	
Kanchanpur	13	3	10	
Kapilvastu	6	5	12	
Sankhuwa	11	6	6	
Saptari	19	4	14	
Syangja	10	4	6	
Total	74	41	71	1

(%)

District	Permanenti(1)	Temporary(2)	Others(3)	Total
Dailekh	20%	44%	36%	10
Dhading	31%	25%	44%	10
Kanchanpur	50%	12%	38%	10
Kapilvastu	26%	22%	52%	10
Sankhuwasabh	48%	26%	26%	10
Saptari	51%	11%	38%	10
Syangja	50%	20%	30%	10
Total	40%	22%	38%	10

Figure 1-48 Type of Appointment



(7) Years of Teaching Experience (T7)

Years of teaching experience are as follows. The most frequent response overall is “Over 16 years” (41%). In Kancharpur, the ratio of this category is the highest (69%). The lowest of this category is Dialekh (24%).

[14] A permanent teacher is qualified by TSC (Teacher Service Commission) exam and deployed in a regular teacher post. A Rahat (temporary) teacher gets paid a salary from the federal regular budget. A temporary teacher is appointed temporarily as per need and gets paid a salary from the school's resources. A temporary teacher is paid by the LG fund and a school appoints.

Table 1-50 Years of Teaching Experience

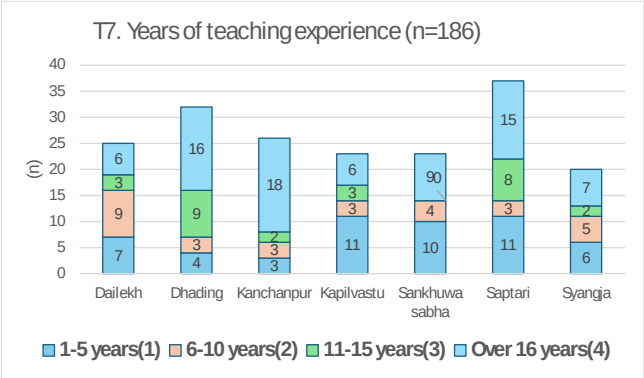
(n)

District	1-5 years(1)	6-10 years(2)	11-15 years(3)	Over 16 years(4)	Total
Dailekh	7	9	3	6	25
Dhading	4	3	9	16	32
Kanchanpur	3	3	2	18	26
Kapilvastu	11	3	3	6	23
Sankhuwa	10	4	0	9	23
Saptari	11	3	8	15	37
Syangja	6	5	2	7	20
Total	52	30	27	77	186

(%)

District	1-5 years(1)	6-10 years(2)	11-15 years(3)	Over 16	Total
Dailekh	28%	36%	12%	24%	100%
Dhading	13%	9%	28%	50%	100%
Kanchanpur	12%	12%	8%	69%	100%
Kapilvastu	48%	13%	13%	26%	100%
Sankhuwasabh	43%	17%	0%	39%	100%
Saptari	30%	8%	22%	41%	100%
Syangja	30%	25%	10%	35%	100%
Total	28%	16%	15%	41%	100%

Figure 1-49 Years of Teaching Experience



(8) The Grade you are teaching maths (T8)

The response for "the grade you are teaching maths in" is as follows. It seems most teachers teach maths to the students in other grades.

Table 1-51 The grade you are teaching maths

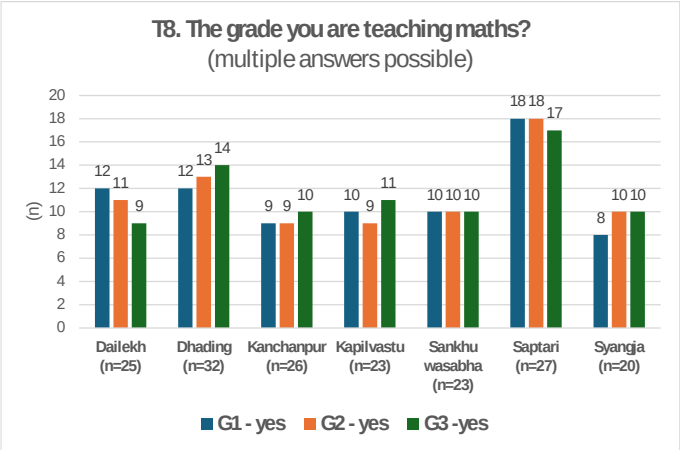
(n)

District	G1 - yes	G2 - yes	G3 -yes
Dailekh	12	11	9
Dhading	12	13	14
Kanchanpur	9	9	10
Kapilvastu	10	9	11
Sankhu	10	10	10
Saptari	18	18	17
Syangja	8	10	10
Total	79	80	81

(%)

District	G1 - yes	G2 - yes	G3 -yes
Dailekh	48%	44%	36%
Dhading	38%	41%	44%
Kanchanpur	35%	35%	38%
Kapilvastu	43%	39%	48%
Sankhuwasabh	43%	43%	43%
Saptari	67%	67%	63%
Syangja	40%	50%	50%
Total	42%	43%	44%

Figure 1-50 The grade you are teaching maths



(9) Other Subjects than Maths you teach (T9)

The responses to "Do you teach other subjects than maths?" (multiple answers possible) are as follows. It seems some teachers teach other subjects in addition to maths. Specifically, most teachers in Saptari teach all four subjects (Mero Nepali, My English, Hamro Serofero and My Mathematics).[15]

[15] There are limitations in analyzing the data collected to determine whether there is a statistically significant difference in test scores between students of teachers who teach only math and students of teachers who teach multiple subjects, and it is not known.

Table 1-52 Other subjects than maths you teach

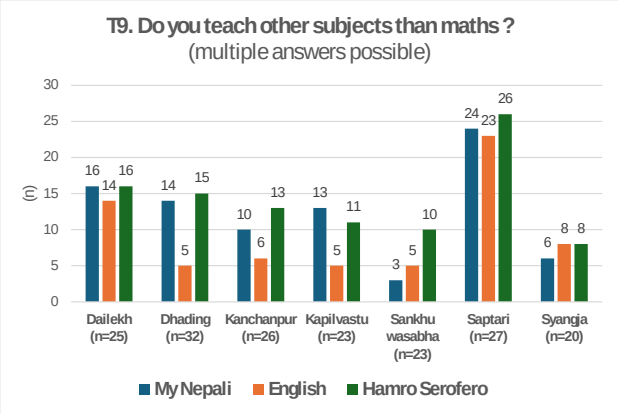
(n)

District	My Nepali	English	Hamro Serofero
Dailekh	16	14	16
Dhading	14	5	15
Kanchanpur	10	6	13
Kapilvastu	13	5	11
Sankhu	3	5	10
Saptari	24	23	26
Syangja	6	8	8
Total	86	66	99

(%)

District	My Nepali	English	Hamro Serofero
Dailekh	64%	56%	64%
Dhading	44%	16%	47%
Kanchanpur	38%	23%	50%
Kapilvastu	57%	22%	48%
Sankhuwasabh	13%	22%	43%
Saptari	89%	85%	96%
Syangja	30%	40%	40%
Total	46%	35%	53%

Figure 1-51 Other subjects than maths you teach



(b) PC and Internet

(10) Does your school have a personal computer (PC)? (T10)

The responses to "Does your school have a personal computer (PC)?" are as follows. Most schools have PC (80% of all schools). Specifically, all teachers in Syangja responded their schools have PC (100%).

Table 1-53 Does your school have a personal computer (PC)

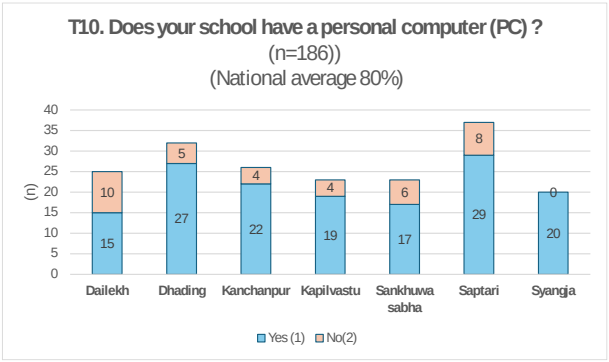
(n)

District	Yes (1)	No(2)	Total
Dailekh	15	10	25
Dhading	27	5	32
Kanchanpur	22	4	26
Kapilvastu	19	4	23
Sankhuwa	17	6	23
Saptari	29	8	37
Syangja	20	0	20
Total	149	37	186

(%)

District	Yes (1)	No(2)	11-15 years(3)
Dailekh	60%	40%	100%
Dhading	84%	16%	100%
Kanchanpur	85%	15%	100%
Kapilvastu	83%	17%	100%
Sankhuwasabh	74%	26%	100%
Saptari	78%	22%	100%
Syangja	100%	0%	100%
Total	80%	20%	100%

Figure 1-52 Does your school have a personal computer (PC)



(11) Is it connected to the Internet so teachers can use it for office work? (T11)

The responses to "Is it connected to the Internet so teachers can use it for office work?" are as follows. Just half of teachers have Internet access (56% of all teachers). All teachers in Syangja responded that they had Internet access for office work (100%).

Table 1-54 Is it connected to the Internet so teachers can use if for office work?

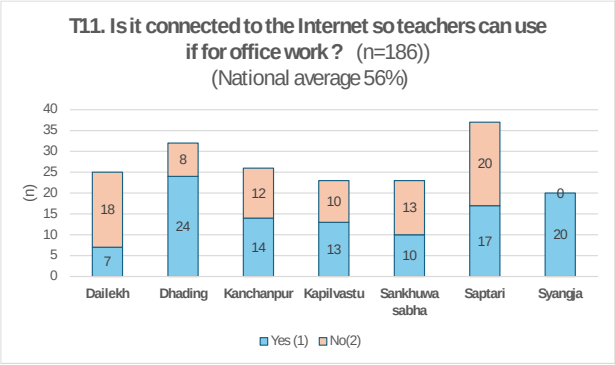
(n)

District	Yes (1)	No(2)	Total
Dailekh	7	18	25
Dhading	24	8	32
Kanchanpur	14	12	26
Kapilvastu	13	10	23
Sankhuwa	10	13	23
Saptari	17	20	37
Syangja	20	0	20
Total	105	81	186

(%)

District	Yes (1)	No(2)	11-15 years(3)
Dailekh	28%	72%	100%
Dhading	75%	25%	100%
Kanchanpur	54%	46%	100%
Kapilvastu	57%	43%	100%
Sankhuwasabh	43%	57%	100%
Saptari	46%	54%	100%
Syangja	100%	0%	100%
Total	56%	44%	100%

Figure 1-53 Is it connected to the Internet so teachers can use if for office work?



(12) Do you have access to the internet at home, on your smartphone or personal computer? (T12)

The response to "Do you have access to the internet at home, on your smartphone or personal computer?" is as follows. Just half of teachers have Internet access (50% of all teachers). All teachers in Syangja responded that they had Internet access for office work (100%).

Table 1-55 Do you have access to the internet at home, on your smartphone or personal computer?

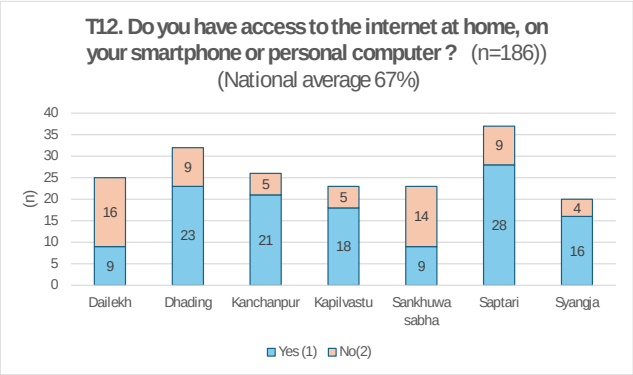
(n)

District	Yes (1)	No(2)	Total
Dailekh	9	16	25
Dhading	23	9	32
Kanchanpur	21	5	26
Kapilvastu	18	5	23
Sankhuwa	9	14	23
Saptari	28	9	37
Syangja	16	4	20
Total	124	62	186

(%)

District	Yes (1)	No(2)	11-15 years(3)
Dailekh	36%	64%	100%
Dhading	72%	28%	100%
Kanchanpur	81%	19%	100%
Kapilvastu	78%	22%	100%
Sankhuwasabh	39%	61%	100%
Saptari	76%	24%	100%
Syangja	80%	20%	100%
Total	67%	33%	100%

Figure 1-54 Do you have access to the internet at home, on your smartphone or personal computer?



(13) Can you use the internet for basic communication (such as Zoom meetings and downloading materials)? (T13)

The response to "Can you use the internet for basic communication (such as Zoom meetings and downloading materials) indicates that 71% of teachers have Internet access. The highest is Syangja (90%), and the lowest is Sankhuwasabha (30%).

Table 1-56 Can you use the internet for basic communication (such as Zoom meetings and downloading materials)?

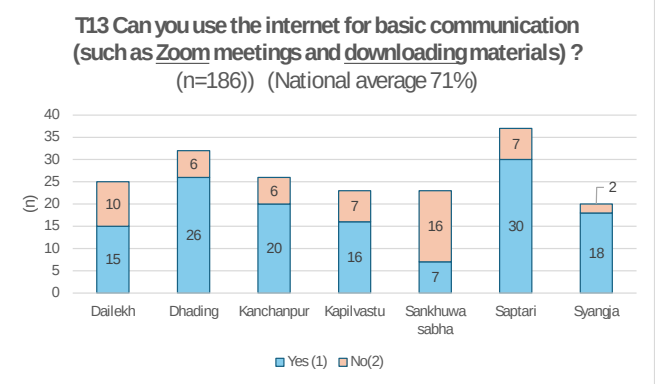
(n)

District	Yes (1)	No(2)	Total
Dailekh	15	10	25
Dhading	26	6	32
Kanchanpur	20	6	26
Kapilvastu	16	7	23
Sankhuwa	7	16	23
Saptari	30	7	37
Syangja	18	2	20
Total	132	54	186

(%)

District	Yes (1)	No(2)	Total
Dailekh	60%	40%	100%
Dhading	81%	19%	100%
Kanchanpur	77%	23%	100%
Kapilvastu	70%	30%	100%
Sankhuwasabh	30%	70%	100%
Saptari	81%	19%	100%
Syangja	90%	10%	100%
Total	71%	29%	100%

Figure 1-55 Can you use the internet for basic communication (such as Zoom meetings and downloading materials)?



(c) Teacher Training

(14) TPD (T14)

The responses to the question “Did you attend a TPD certification training (phase 1)?” are as follows. The overall response for “yes” is 42%, and 58% is “no”. The highest ratio of “yes” among the seven districts is Kanchanpur (62%), and the lowest is Dailekh (24%).

Table 1-57 Did you attend a TPD certification training (phase 1)?

(n)

District	Yes (1)	No(2)	Total
Dailekh	6	19	25
Dhading	17	15	32
Kanchanpur	16	10	26
Kapilvastu	8	15	23
Sankhuwa	9	14	23
Saptari	14	23	37
Syangja	8	12	20
Total	78	108	186

(%)

District	Yes (1)	No(2)	Total
Dailekh	24%	76%	100%
Dhading	53%	47%	100%
Kanchanpur	62%	38%	100%
Kapilvastu	35%	65%	100%
Sankhuwasabh	39%	61%	100%
Saptari	38%	62%	100%
Syangja	40%	60%	100%
Total	42%	58%	100%

Figure 1-56 Did you attend a TPD certification training (phase 1)?

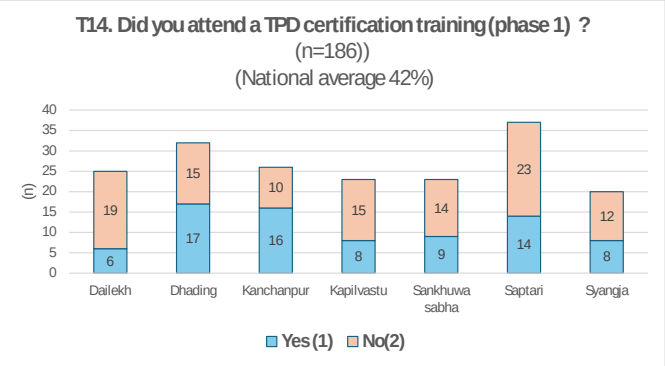


Table 1-58-a and Figure 1-57-a If yes (attended to TPD), specify the mode (T15-1)

(n)

District	Not attend (0)	Face-to-face(1)	Online(2)	Both (face-to-faca and online) (3)	Total
Dailekh	19	6	0	0	25
Dhading	15	12	1	4	32
Kanchanpur	10	16	0	0	26
Kapilvastu	15	8	0	0	23
Sankhuwa	14	9	0	0	23
Saptari	23	14	0	0	37
Syangja	12	8	0	0	20
Total	108	73	1	4	186

(%)

District	1-5 years(1)	Face-to-face(1)	Online(2)	Both (face-to-faca and online) (3)	11-15 years(3)
Dailekh	76%	24%	0%	0%	100%
Dhading	47%	38%	3%	13%	100%
Kanchanpur	38%	62%	0%	0%	100%
Kapilvastu	65%	35%	0%	0%	100%
Sankhuwasabh	61%	39%	0%	0%	100%
Saptari	62%	38%	0%	0%	100%
Syangja	60%	40%	0%	0%	100%
Total	58%	39%	1%	2%	100%

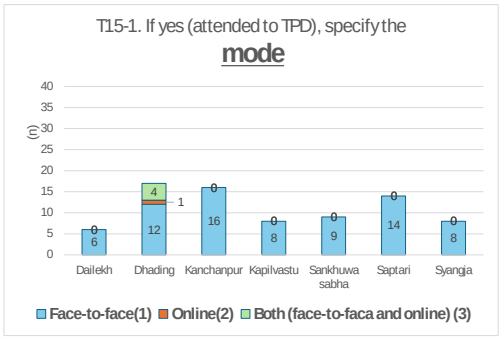


Table 1-58-b and Figure 1-57-b If yes (attend to TPD face-to-face), specify the venue (T15-2)

(n)

District	Not attend (0)	ETC(1)	District headquarter (2)	Others (3)	Total
Dailekh	19	3	1	2	25
Dhading	16	5	2	9	32
Kanchanpur	10	6	1	9	26
Kapilvastu	15	2	1	5	23
Sankhuwa	14	2	3	4	23
Saptari	23	7	2	5	37
Syangja	12	8	0	0	20
Total	109	33	10	34	186

(%)

District	Not attend (0)	ETC(1)	District headquarter	Others (3)	11-15 years(3)
Dailekh	76%	12%	4%	8%	100%
Dhading	50%	16%	6%	28%	100%
Kanchanpur	38%	23%	4%	35%	100%
Kapilvastu	65%	9%	4%	22%	100%
Sankhuwasabh	61%	9%	13%	17%	100%
Saptari	62%	19%	5%	14%	100%
Syangja	60%	40%	0%	0%	100%
Total	59%	18%	5%	18%	100%

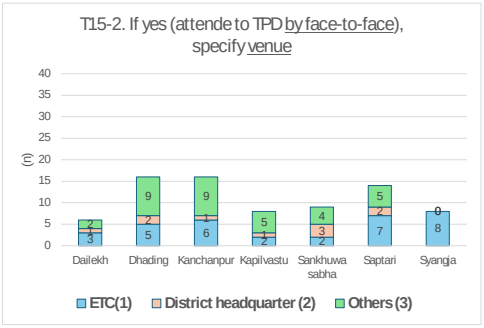


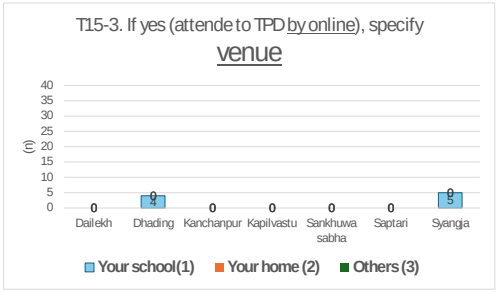
Table 1-58-c and Figure 1-57-c If yes (attend to TPD online), specify the venue (T15-3)

(n)

District	Not attend (0)	Your school (1)	Your home (2)	Others (3)	Total
Dailekh	25	0	0	0	25
Dhading	28	4	0	0	32
Kanchanpur	26	0	0	0	26
Kapilvastu	23	0	0	0	23
Sankhuwa	23	0	0	0	23
Saptari	37	0	0	0	37
Syangja	15	5	0	0	20
Total	177	9	0	0	186

(%)

District	Not attend (0)	Your school (1)	Your home (2)	Others (3)	Total
Dailekh	100%	0%	0%	0%	100%
Dhading	88%	13%	0%	0%	100%
Kanchanpur	100%	0%	0%	0%	100%
Kapilvastu	100%	0%	0%	0%	100%
Sankhuwasabh	100%	0%	0%	0%	100%
Saptari	100%	0%	0%	0%	100%
Syangja	75%	25%	0%	0%	100%
Total	95%	5%	0%	0%	100%



(15) Customized Training (T16)

The responses to the question “Did you attend a customized teacher training on integrated curriculum?” are as follows. The overall response for “yes” is 32%, and 68% is “no”. The highest ratio of “yes” among the seven districts is Kanchanpur (54%), and the lowest is Sankhuwasabha (17%).

Table 1-59 and Figure 1-58 Did you attend a customized teacher training?

(n)

District	Yes (1)	No(2)	Total
Dailekh	5	20	25
Dhading	13	19	32
Kanchanpur	14	12	26
Kapilvastu	0	23	23
Sankhuwa	4	19	23
Saptari	18	19	37
Syangja	5	15	20
Total	59	127	186

(%)

District	Yes (1)	No(2)	Total
Dailekh	20%	80%	100%
Dhading	41%	59%	100%
Kanchanpur	54%	46%	100%
Kapilvastu	0%	100%	100%
Sankhuwasabh	17%	83%	100%
Saptari	49%	51%	100%
Syangja	25%	75%	100%
Total	32%	68%	100%

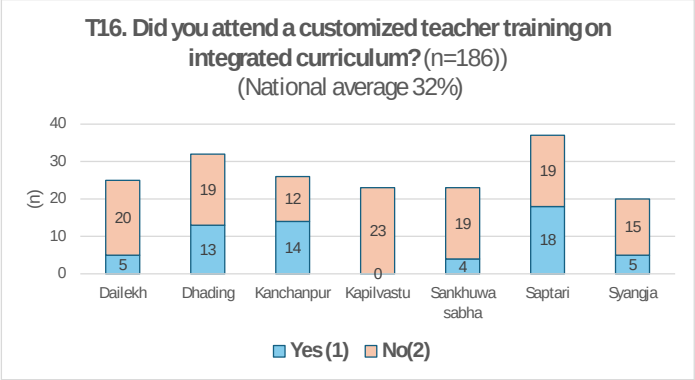


Table 1-60-a and Figure 1-59-a If yes (attended to a customized teacher training), specify the mode (T17-1)

(n)

District	Not attend (0)	Face-to-face(1)	Online(2)	Both (face-to-faca and online) (3)	Total
Dailekh	20	4	1	0	25
Dhading	19	13	0	0	32
Kanchanpur	12	14	0	0	26
Kapilvastu	23	0	0	0	23
Sankhuwa	19	4	0	0	23
Saptari	19	17	0	1	37
Syangja	15	4	0	1	20
Total	127	56	1	2	186

(%)

District	Not attend (0)	Face-to-face(1)	Online(2)	Both (face-to-faca and online) (3)	Total
Dailekh	80%	16%	4%	0%	100%
Dhading	59%	41%	0%	0%	100%
Kanchanpur	46%	54%	0%	0%	100%
Kapilvastu	100%	0%	0%	0%	100%
Sankhuwasabh	83%	17%	0%	0%	100%
Saptari	51%	46%	0%	3%	100%
Syangja	75%	20%	0%	5%	100%
Total	68%	30%	1%	1%	100%

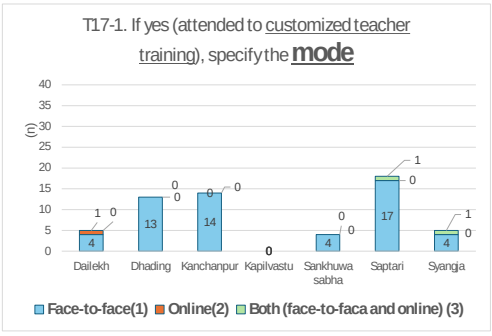


Table 1-60-b and Figure 1-59-b If yes (attended a customized teacher training), specify the venue (T17-2)

(n)

District	Not attend (0)	LG(1)	Your school (2)	Others (3)	Total
Dailekh	21	3	0	1	25
Dhading	19	11	2	0	32
Kanchanpur	11	9	1	5	26
Kapilvastu	23	0	0	0	23
Sankhuwa	19	2	2	0	23
Saptari	19	18	0	0	37
Syangja	16	4	0	0	20
Total	128	47	5	6	186

(%)

District	Not attend (0)	LG(1)	Your school (2)	Others (3)	11-15 years(3)
Dailekh	84%	12%	0%	4%	100%
Dhading	59%	34%	6%	0%	100%
Kanchanpur	42%	35%	4%	19%	100%
Kapilvastu	100%	0%	0%	0%	100%
Sankhuwasabh	83%	9%	9%	0%	100%
Saptari	51%	49%	0%	0%	100%
Syangja	80%	20%	0%	0%	100%
Total	69%	25%	3%	3%	100%

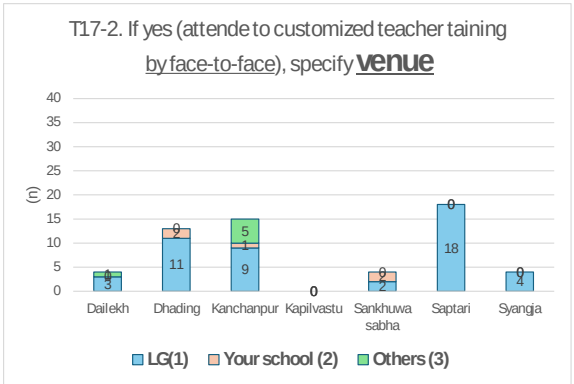


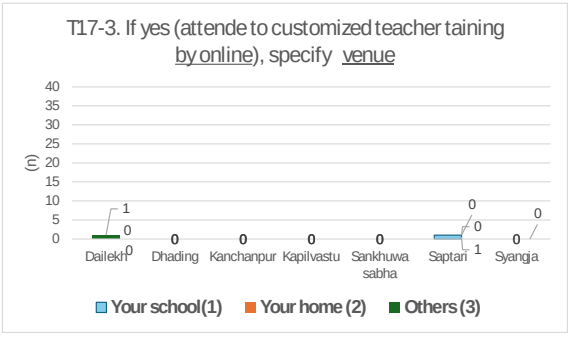
Table 1-60-c and Figure 1-59-c If yes (attended a customized teacher training online), specify the venue (T17-3)

(n)

District	Not attend (0)	Your school(1)	Your home (2)	Others (3)	Total
Dailekh	24	0	0	1	25
Dhading	32	0	0	0	32
Kanchanpur	26	0	0	0	26
Kapilvastu	23	0	0	0	23
Sankhuwa	23	0	0	0	23
Saptari	36	1	0	0	37
Syangja	20	0	0	0	20
Total	184	1	0	1	186

(%)

District	Not attend (0)	Your school(1)	Your home (2)	Others (3)	Total
Dailekh	96%	0%	0%	4%	100%
Dhading	100%	0%	0%	0%	100%
Kanchanpur	100%	0%	0%	0%	100%
Kapilvastu	100%	0%	0%	0%	100%
Sankhuwasabh	100%	0%	0%	0%	100%
Saptari	97%	3%	0%	0%	100%
Syangja	100%	0%	0%	0%	100%
Total	99%	1%	0%	1%	100%



(d) Teaching and Learning Material

(16) Materials related to IC (T18)

The responses to the question "What types of materials related to IC do you have?" are as follows. Almost all teachers have "Curriculum G1-G3)" (94%) and "Teacher Guide" (94%) as well as "Student Evaluation Guide" (99%).

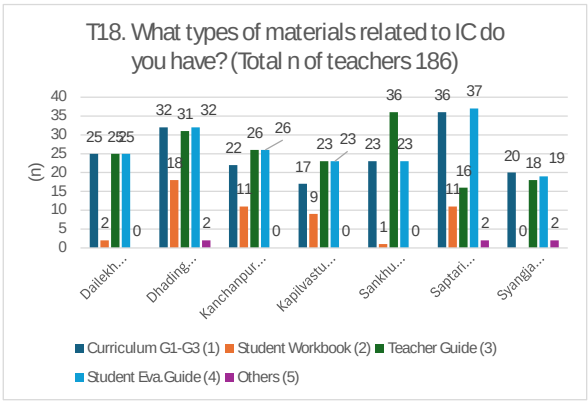
Table 1-61 and Figure 1-60 What types of materials related to IC do you have?

(n)

District	Curriculum G1-G3 (1)	Student Workbook (2)	Teacher Guide (3)	Student Eva.Guide (4)	Others (5)	n of teachers
Dailekh	25	2	25	25	0	25
Dhading	32	18	31	32	2	32
Kanchanpur	22	11	26	26	0	26
Kapilvastu	17	9	23	23	0	23
Sankhu	23	1	36	23	0	23
Saptari	36	11	16	37	2	37
Syangja	20	0	18	19	2	20
Total	175	52	175	185	6	186

(%)

District	Curriculum G1-G3 (1)	Student Workbook (2)	Teacher Guide (3)	Student Eva.Guide (4)	Others (5)	Total
Dailekh	100%	8%	100%	100%	0%	100%
Dhading	100%	56%	97%	100%	6%	100%
Kanchanpur	85%	42%	100%	100%	0%	100%
Kapilvastu	74%	39%	100%	100%	0%	100%
Sankhuwasa	100%	4%	157%	100%	0%	100%
Saptari	97%	30%	43%	100%	5%	100%
Syangja	100%	0%	90%	95%	10%	100%
Total	94%	28%	94%	99%	3%	100%



(17) Does your school have a teacher's guide to maths? (T19)

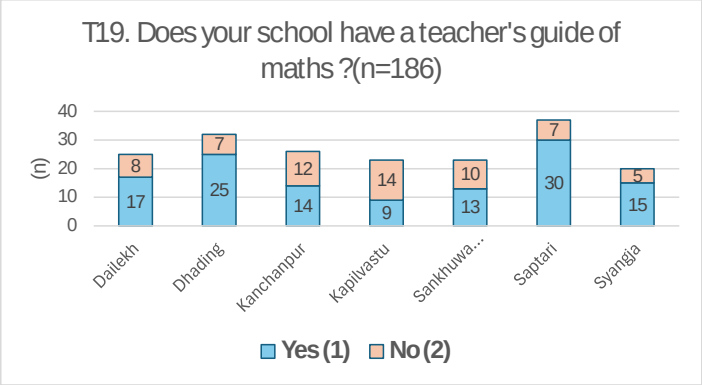
The overall response for "yes" is 66%, and 34% is "no". The highest ratio of "yes" among the seven districts is Saptari (81%), and the lowest is Kapilvastu (39%).

Table 1-62 and Figure 1-61 Does your school have a teacher's guide to maths?

District	Yes (1)	No (2)	Total
Dailekh	17	8	25
Dhading	25	7	32
Kanchanpur	14	12	26
Kapilvastu	9	14	23
Sankhuwa	13	10	23
Saptari	30	7	37
Syangja	15	5	20
Total	123	63	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	68%	32%	100%
Dhading	78%	22%	100%
Kanchanpur	54%	46%	100%
Kapilvastu	39%	61%	100%
Sankhuwasabh	57%	43%	100%
Saptari	81%	19%	100%
Syangja	75%	25%	100%
Total	66%	34%	100%



(18) Do you have a self-learning material of maths? (T20)

The overall response for "yes" is 16%, and 84% is "no". The highest ratio of "yes" among the seven districts is Kapilvastu (30%), and the lowest is Dadhing (0%).

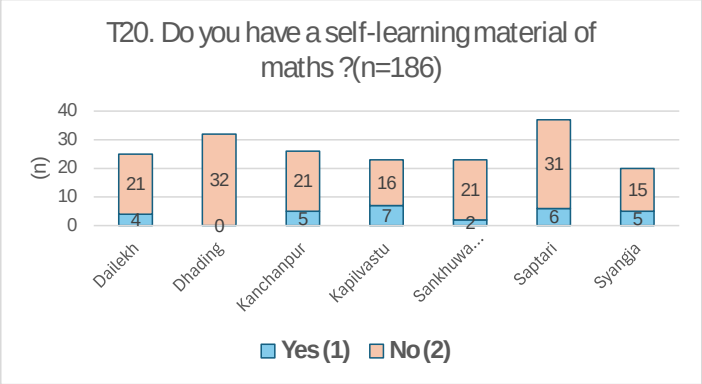
Table 1-63 and Figure 1-62 Do you have a self-learning material of maths?

(n)

District	Yes (1)	No (2)	Total
Dailekh	4	21	25
Dhading	0	32	32
Kanchanpur	5	21	26
Kapilvastu	7	16	23
Sankhuwa	2	21	23
Saptari	6	31	37
Syangja	5	15	20
Total	29	157	186

(%)

District	Nepali(1)	Others(2)	Total
Dailekh	16%	84%	100%
Dhading	0%	100%	100%
Kanchanpur	19%	81%	100%
Kapilvastu	30%	70%	100%
Sankhuwasabh	9%	91%	100%
Saptari	16%	84%	100%
Syangja	25%	75%	100%
Total	16%	84%	100%



(19) Which version of the CDC workbook do you use? (T21)

The overall response for "Written in Nepal" is 74%, and "Written in English" is 31%. The highest ratio of "Written in English" among the seven districts is Syangja (50%). In other districts, "Written in Nepal" is dominant (65% - 100%)

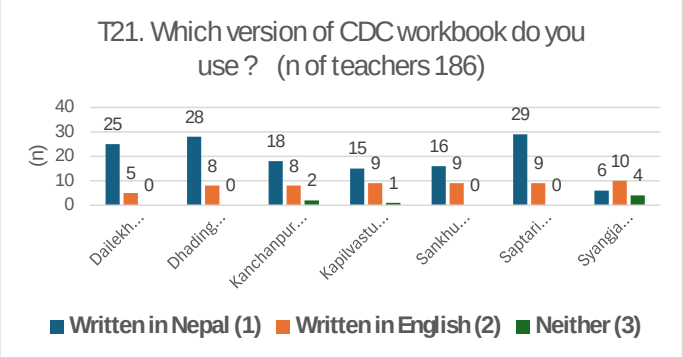
Table 1-64 and Figure 1-63 Which version of the CDC workbook do you use?

(n)

District	Written in Nepal (1)	Written in English (2)	Neither (3)	n of teachers
Dailekh	25	5	0	25
Dhading	28	8	0	32
Kanchanpur	18	8	2	26
Kapilvastu	15	9	1	23
Sankhu	16	9	0	23
Saptari	29	9	0	37
Syangja	6	10	4	20
Total	137	58	7	186

(%)

District	Written in Nepal (1)	Written in English (2)	Neither (3)	n of teachers
Dailekh	100%	20%	0%	100%
Dhading	88%	25%	0%	100%
Kanchanpur	69%	31%	8%	100%
Kapilvastu	65%	39%	4%	100%
Sankhuwasa bh	70%	39%	0%	100%
Saptari	78%	24%	0%	100%
Syangja	30%	50%	20%	100%
Total	74%	31%	4%	100%



(20) Do you use other math materials instead of or in addition to the CDC workbook? (T22)

The overall response for "yes" is 21%, and "no" is 79%. The highest ratio of "yes" among the seven districts is Syangja (50%), and the lowest is Dailekh (0%).

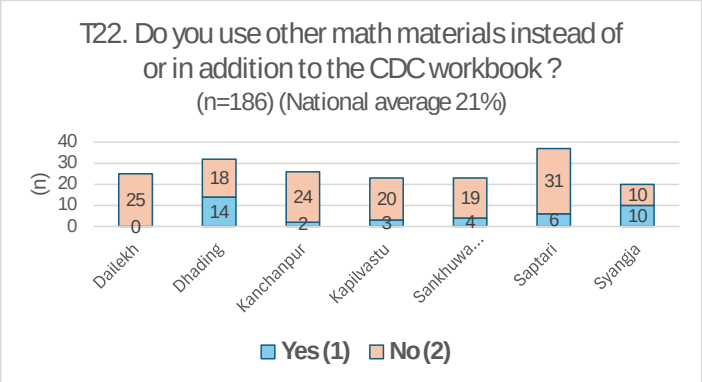
Table 1-65 and Figure 1-64 Do you use other math materials instead of or in addition to the CDC workbook?

(n)

District	Yes (1)	No (2)	Total
Dailekh	0	25	25
Dhading	14	18	32
Kanchanpur	2	24	26
Kapilvastu	3	20	23
Sankhuwa	4	19	23
Saptari	6	31	37
Syangja	10	10	20
Total	39	147	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	0%	100%	100%
Dhading	44%	56%	100%
Kanchanpur	8%	92%	100%
Kapilvastu	13%	87%	100%
Sankhuwasabh	17%	83%	100%
Saptari	16%	84%	100%
Syangja	50%	50%	100%
Total	21%	79%	100%



(e) Teaching and Learning Material

(21) Do you know about the Integrated Curriculum? (T23)

The overall response for "yes" is 77%, and "no" is 23%. The highest "No" is Dailekh (56%).

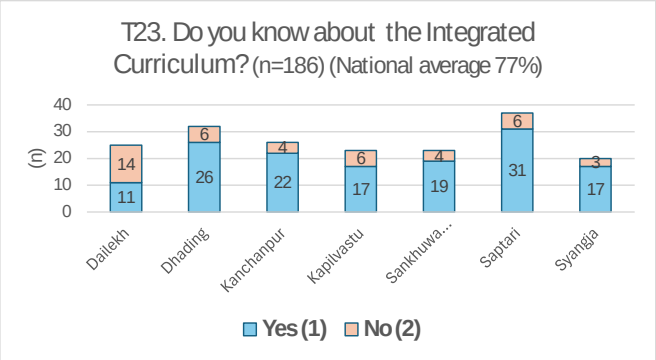
Table 1-66 and Figure 1-65 Do you know about the Integrated Curriculum?

(n)

District	Yes (1)	No (2)	Total
Dailekh	11	14	25
Dhading	26	6	32
Kanchanpur	22	4	26
Kapilvastu	17	6	23
Sankhuwa	19	4	23
Saptari	31	6	37
Syangja	17	3	20
Total	143	43	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	44%	56%	100%
Dhading	81%	19%	100%
Kanchanpur	85%	15%	100%
Kapilvastu	74%	26%	100%
Sankhuwasabh	83%	17%	100%
Saptari	84%	16%	100%
Syangja	85%	15%	100%
Total	77%	23%	100%



(22) Do you use local material while conducting lessons? (T24)

The overall response for "yes" is 95%, and "no" is 5%.

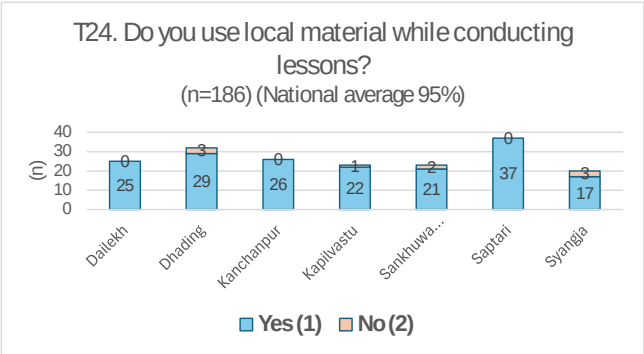
Table 1-67 and Figure 1-66 Do you use local material while conducting lessons?

(n)

District	Yes (1)	No (2)	Total
Dailekh	25	0	25
Dhading	29	3	32
Kanchanpur	26	0	26
Kapilvastu	22	1	23
Sankhuwa	21	2	23
Saptari	37	0	37
Syangja	17	3	20
Total	177	9	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	100%	0%	100%
Dhading	91%	9%	100%
Kanchanpur	100%	0%	100%
Kapilvastu	96%	4%	100%
Sankhuwasabh	91%	9%	100%
Saptari	100%	0%	100%
Syangja	85%	15%	100%
Total	95%	5%	100%



(23) Do you link classroom activity with student's daily life? (T25)

The overall response for "yes" is 95%, and "no" is 5%. The highest "No" is Syangja (25%).

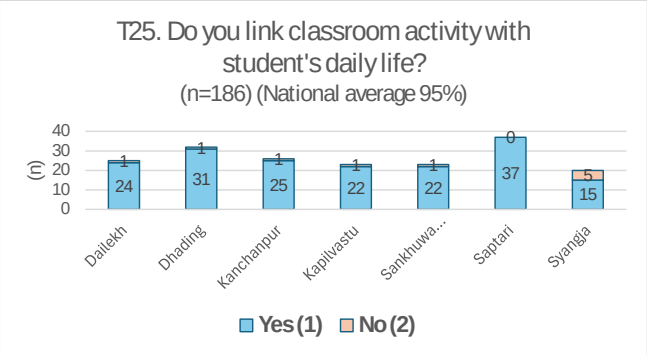
Table 1-68 and Figure 1-67 Do you link classroom activity with student's daily life?

(n)

District	Yes (1)	No (2)	Total
Dailekh	24	1	25
Dhading	31	1	32
Kanchanpur	25	1	26
Kapilvastu	22	1	23
Sankhuwa	22	1	23
Saptari	37	0	37
Syangja	15	5	20
Total	176	10	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	96%	4%	100%
Dhading	97%	3%	100%
Kanchanpur	96%	4%	100%
Kapilvastu	96%	4%	100%
Sankhuwasabh	96%	4%	100%
Saptari	100%	0%	100%
Syangja	75%	25%	100%
Total	95%	5%	100%



(24) Do you link maths lessons with other subjects? (T26)

The overall response for "yes" is 74%, and "no" is 26%. The highest "No" is Deilekh (52%).

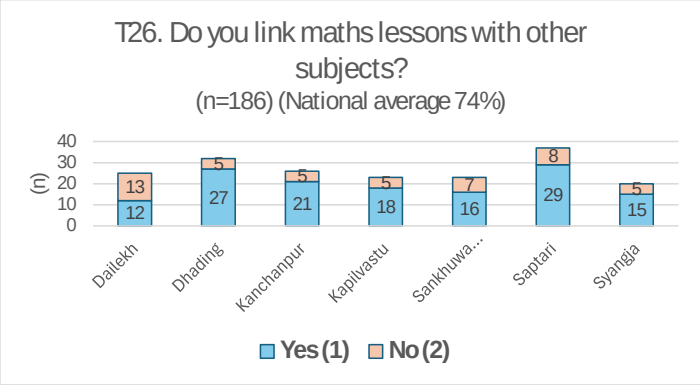
Table 1-69 and Figure 1-68 Do you link maths lessons with other subjects?

(n)

District	Yes (1)	No (2)	Total
Dailekh	12	13	25
Dhading	27	5	32
Kanchanpur	21	5	26
Kapilvastu	18	5	23
Sankhuwa	16	7	23
Saptari	29	8	37
Syangja	15	5	20
Total	138	48	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	48%	52%	100%
Dhading	84%	16%	100%
Kanchanpur	81%	19%	100%
Kapilvastu	78%	22%	100%
Sankhuwasabh	70%	30%	100%
Saptari	78%	22%	100%
Syangja	75%	25%	100%
Total	74%	26%	100%



(25) How often do you provide project work for students? (T27)

The overall response for "1-2 times a month" is 42%, and the second is "1-2 times a week" (27%).

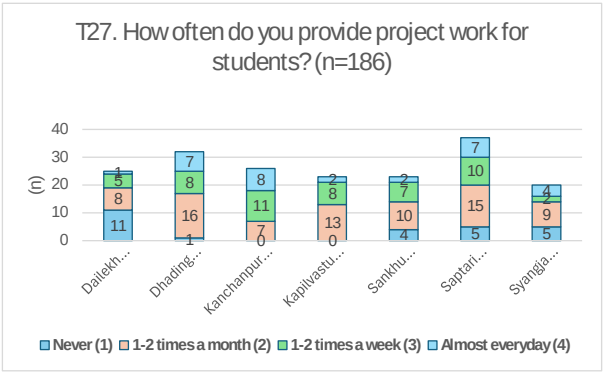
Table 1-70 and Figure 1-69 How often do you provide project work for students?

(n)

District	Never (1)	1-2 times a month (2)	1-2 times a week (3)	Almost everyday (4)	Total
Dailekh	11	8	5	1	25
Dhading	1	16	8	7	32
Kanchanpur	0	7	11	8	26
Kapilvastu	0	13	8	2	23
Sankhu	4	10	7	2	23
Saptari	5	15	10	7	37
Syangja	5	9	2	4	20
Total	26	78	51	31	186

(%)

District	Never (1)	1-2 times a month (2)	1-2 times a week (3)	Almost everyday (4)	Total
Dailekh	44%	32%	20%	4%	100%
Dhading	3%	50%	25%	22%	100%
Kanchanpur	0%	27%	42%	31%	100%
Kapilvastu	0%	57%	35%	9%	100%
Sankhuwasabha	17%	43%	30%	9%	100%
Saptari	14%	41%	27%	19%	100%
Syangja	25%	45%	10%	20%	100%
Total	14%	42%	27%	17%	100%



(26) How often do you use group or pair work during the maths lesson? (T28)

The overall response for "1-2 times a month" is 45%, and the second is "Almost every day" (38%).

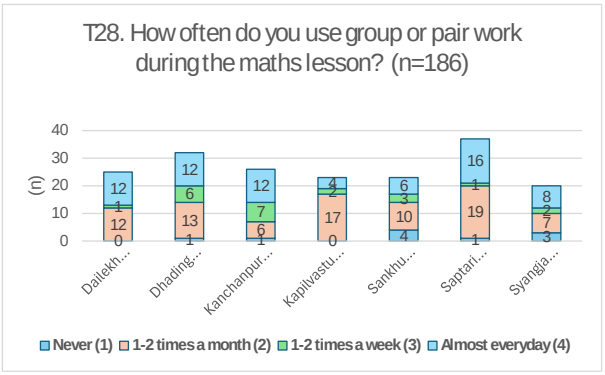
Table 2-71 and Figure 2-70 How often do you use group or pair work during the maths lesson?

(n)

District	Never (1)	1-2 times a month (2)	1-2 times a week (3)	Almost everyday (4)	Total
Dailekh	0	12	1	12	25
Dhading	1	13	6	12	32
Kanchanpur	1	6	7	12	26
Kapilvastu	0	17	2	4	23
Sankhu	4	10	3	6	23
Saptari	1	19	1	16	37
Syangja	3	7	2	8	20
Total	10	84	22	70	186

(%)

District	Never (1)	1-2 times a month (2)	1-2 times a week (3)	Almost everyday (4)	Total
Dailekh	0%	48%	4%	48%	100%
Dhading	3%	41%	19%	38%	100%
Kanchanpur	4%	23%	27%	46%	100%
Kapilvastu	0%	74%	9%	17%	100%
Sankhuwasabha	17%	43%	13%	26%	100%
Saptari	3%	51%	3%	43%	100%
Syangja	15%	35%	10%	40%	100%
Total	5%	45%	12%	38%	100%



(27) Do you make students' portfolios? (T29)

The overall response for "Yes" is 56% and "No" (44%).

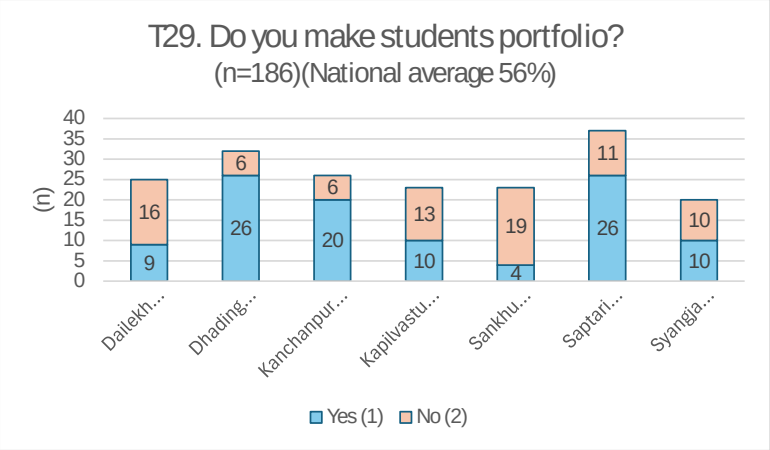
Table 1-72 and Figure 1-71 Do you make students' portfolios?

(n)

District	Yes (1)	No (2)	Total
Dailekh	9	16	25
Dhading	26	6	32
Kanchanpur	20	6	26
Kapilvastu	10	13	23
Sankhu	4	19	23
Saptari	26	11	37
Syangja	10	10	20
Total	105	81	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	36%	64%	100%
Dhading	81%	19%	100%
Kanchanpur	77%	23%	100%
Kapilvastu	43%	57%	100%
Sankhuwasab	17%	83%	100%
Saptari	70%	30%	100%
Syangja	50%	50%	100%
Total	56%	44%	100%



(28) Which methods do you apply for the internal evaluation? (Multiple answers possible) (T30)

The highest is "Participation in a class" (89%), with "Oral task" (85%) and "Written test" (85%).

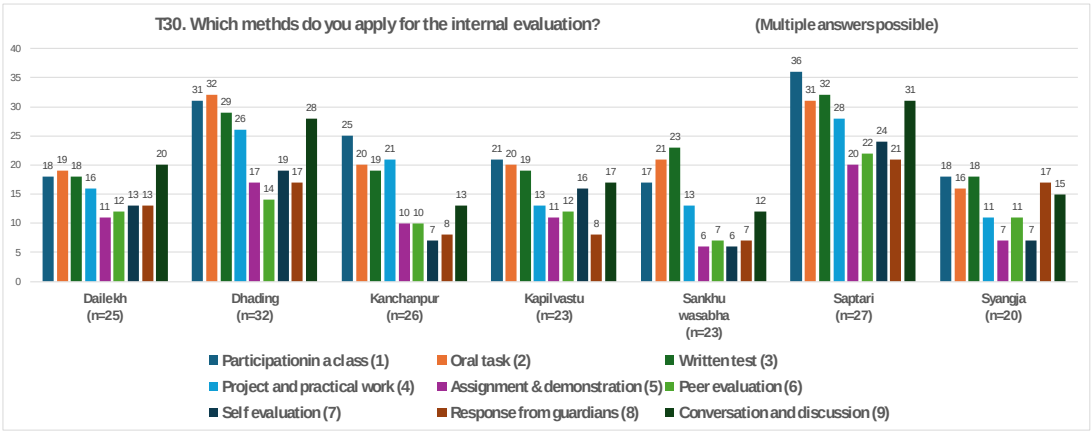
Table 1-73 and Figure 1-72 Which methods do you apply for the internal evaluation?

(n)

District	Participationin a class (1)	Oral task (2)	Written test (3)	Project and practical work (4)	Assignment & demonstration (5)	Peer evaluation (6)	Self evaluation (7)	Response from guardians (8)	Conversation and discussion (9)	n of teachers
Dailekh	18	19	18	16	11	12	13	13	20	25
Dhading	31	32	29	26	17	14	19	17	28	32
Kanchanpur	25	20	19	21	10	10	7	8	13	26
Kapilvastu	21	20	19	13	11	12	16	8	17	23
Sankhu	17	21	23	13	6	7	6	7	12	23
Saptari	36	31	32	28	20	22	24	21	31	37
Syangja	18	16	18	11	7	11	7	17	15	20
Total	166	159	158	128	82	88	92	91	136	186

(%)

District	Participationin a class (1)	Oral task (2)	Written test (3)	Project and practical work (4)	Assignment & demonstration (5)	Peer evaluation (6)	Self evaluation (7)	Response from guardians (8)	Conversation and discussion (9)	n of teachers
Dailekh	72%	76%	72%	64%	44%	48%	52%	52%	80%	100%
Dhading	97%	100%	91%	81%	53%	44%	59%	53%	88%	100%
Kanchanpur	96%	77%	73%	81%	38%	38%	27%	31%	50%	100%
Kapilvastu	91%	87%	83%	57%	48%	52%	70%	35%	74%	100%
Sankhuwasabh	74%	91%	100%	57%	26%	30%	26%	30%	52%	100%
Saptari	97%	84%	86%	76%	54%	59%	65%	57%	84%	100%
Syangja	90%	80%	90%	55%	35%	55%	35%	85%	75%	100%
Total	89%	85%	85%	69%	44%	47%	49%	49%	73%	100%



(f) TPD Support and Guidance

(29) Do you join a technical meeting[16] with other teachers at your school? (T31)

The overall response for "yes" is 50%, and "no" is 50%. The highest "Yes" is Saptari (97%), and the lowest is Dailekh (16%).

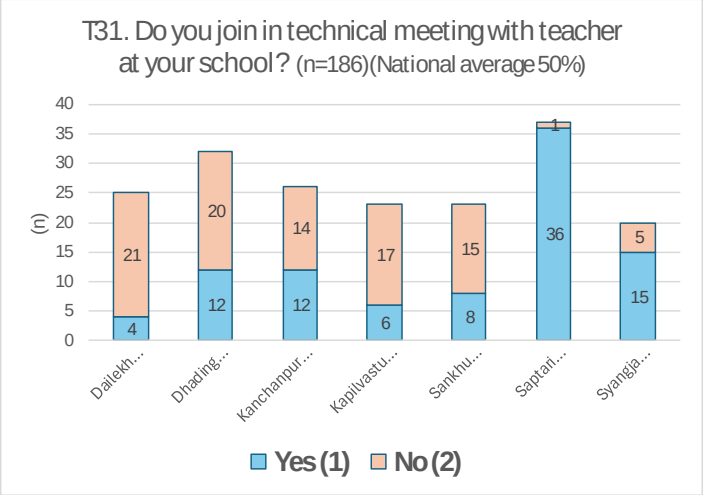
Table 1-74 and Figure 1-73 Do you join a technical meeting with other teachers at your school?

(n)

District	Yes (1)	No (2)	Total
Dailekh	4	21	25
Dhading	12	20	32
Kanchanpur	12	14	26
Kapilvastu	6	17	23
Sankhu	8	15	23
Saptari	36	1	37
Syangja	15	5	20
Total	93	93	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	16%	84%	100%
Dhading	38%	63%	100%
Kanchanpur	46%	54%	100%
Kapilvastu	26%	74%	100%
Sankhuwasabha	35%	65%	100%
Saptari	97%	3%	100%
Syangja	75%	25%	100%
Total	50%	50%	100%



(30) How many times have you participated in technical meetings with teachers in the last academic year? (T32)

The responses are as follows. The highest is "Never" (38%), with "4-6 times" (17%), with "1-3 times" (16%) and "7 or more times" (16%).

[16] There is also a regular meeting where the head teacher and teachers gather, separate from the technical meeting.

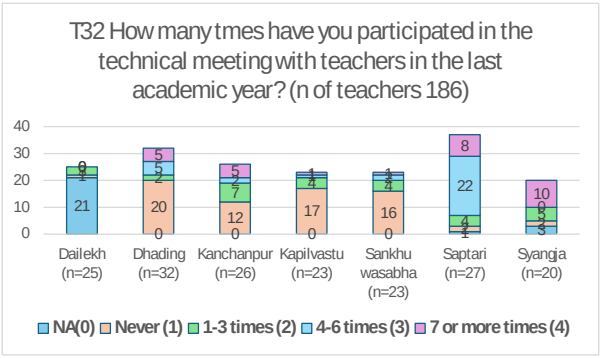
Table 1-75 and Figure 1-74 How many times have you participated in technical meetings with teachers in the last academic year?

(n)

District	NA(0)	Never (1)	1-3 times (2)	4-6 times (3)	7 or more times (4)	Total
Dailekh	21	1	3	0	0	25
Dhading	0	20	2	5	5	32
Kanchanpur	0	12	7	2	5	26
Kapilvastu	0	17	4	1	1	23
Sankhu	0	16	4	2	1	23
Saptari	1	2	4	22	8	37
Syangja	3	2	5	0	10	20
Total	25	70	29	32	30	186

(%)

District	NA(0)	Never (1)	1-3 times (2)	4-6 times (3)	7 or more times (4)	Total
Dailekh	84%	4%	12%	0%	0%	100%
Dhading	0%	63%	6%	16%	16%	100%
Kanchanpur	0%	46%	27%	8%	19%	100%
Kapilvastu	0%	74%	17%	4%	4%	100%
Sankhu	0%	70%	17%	9%	4%	100%
Saptari	3%	5%	11%	59%	22%	100%
Syangja	15%	10%	25%	0%	50%	100%
Total	13%	38%	16%	17%	16%	100%



(31) Do you know Lesson Study? (T34)

The overall response for "yes" is only 4% and "no" is 96%. The highest "Yes" is Syangja (25%).

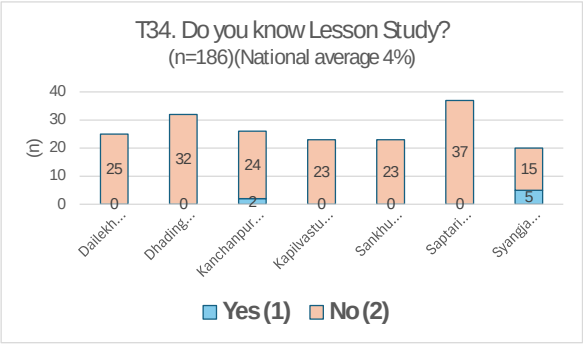
Table 1-76 and Figure 1-75 Do you know Lesson Study?

(n)

District	Yes (1)	No (2)	Total
Dailekh	0	25	25
Dhading	0	32	32
Kanchanpur	2	24	26
Kapilvastu	0	23	23
Sankhu	0	23	23
Saptari	0	37	37
Syangja	5	15	20
Total	7	179	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	0%	100%	100%
Dhading	0%	100%	100%
Kanchanpur	8%	92%	100%
Kapilvastu	0%	100%	100%
Sankhuwasab	0%	100%	100%
Saptari	0%	100%	100%
Syangja	25%	75%	100%
Total	4%	96%	100%



(32) How many times have you participated in Lesson Study in the last academic year? (T35

The responses are as follows. Only 5 teachers in Syangja responded by "1-3 times" (n=2), "4-6 times" (n=1) and "7 or more times) (n=2%). [17]

[17] Following the TPD certification training, some teachers attempted to implement that approach in their respective schools. However, these efforts were limited to an initial trial rather than part of a systematic and collaborative process defining a formal Lesson Study. There is also confusion between Lesson Study and other informal peer-learning activities conducted within their schools.

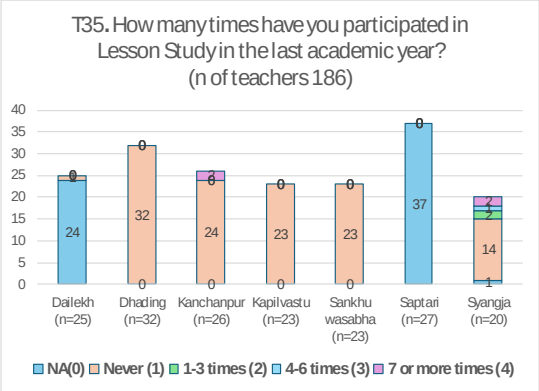
Table 1-77and Figure 1-76 How many times have you participated in Lesson Study in the last academic year?

(n)

District	NA(0)	Never (1)	1-3 times	4-6 times	7 or more	Total
Dailekh	24	1	0	0	0	25
Dhading	0	32	0	0	0	32
Kanchanpur	0	24	0	0	2	26
Kapilvastu	0	23	0	0	0	23
Sankhu	0	23	0	0	0	23
Saptari	37	0	0	0	0	37
Syangja	1	14	2	1	2	20
Total	62	117	2	1	4	186

(%)

District	NA(0)	Never (1)	1-3 times	4-6 times	7 or more	Total
Dailekh	96%	4%	0%	0%	0%	100%
Dhading	0%	100%	0%	0%	0%	100%
Kanchanpur	0%	92%	0%	0%	8%	100%
Kapilvastu	0%	100%	0%	0%	0%	100%
Sankhu	0%	100%	0%	0%	0%	100%
Saptari	100%	0%	0%	0%	0%	100%
Syangja	5%	70%	10%	5%	10%	100%
Total	33%	63%	1%	1%	2%	100%



(33) Is there an opportunity to exchange information and learn from other teachers at nearby schools? (T37)

The overall response for “yes” is only 45% and “no” is 55%. The highest “Yes” is Kanchanpur (44%), and the lowest is Sankhuwasabha (17%).

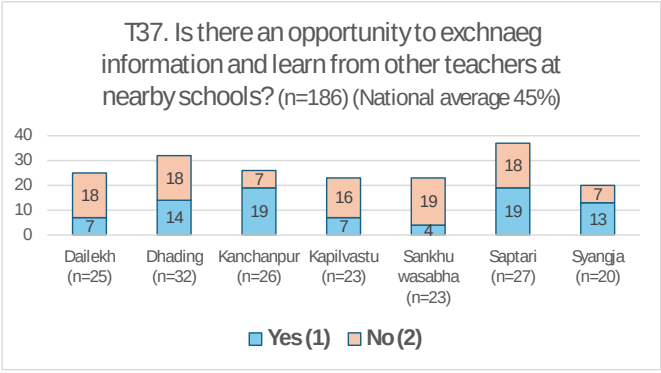
Table 1-78 and Figure 1-77 Is there an opportunity to exchange information and learn from other teachers at nearby schools?

(n)

District	Yes (1)	No (2)	Total
Dailekh	7	18	25
Dhading	14	18	32
Kanchanpur	19	7	26
Kapilvastu	7	16	23
Sankhu	4	19	23
Saptari	19	18	37
Syangja	13	7	20
Total	83	103	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	28%	72%	100%
Dhading	44%	56%	100%
Kanchanpur	73%	27%	100%
Kapilvastu	30%	70%	100%
Sankhuwasabha	17%	83%	100%
Saptari	51%	49%	100%
Syangja	65%	35%	100%
Total	45%	55%	100%



(34) Do you receive any TPD support from LEU in the last academic year? (T38)

The overall response for “yes” is only 30% and “no” is 70%. The highest “Yes” is Saptari (57%), and the lowest is Deilekh (0%).

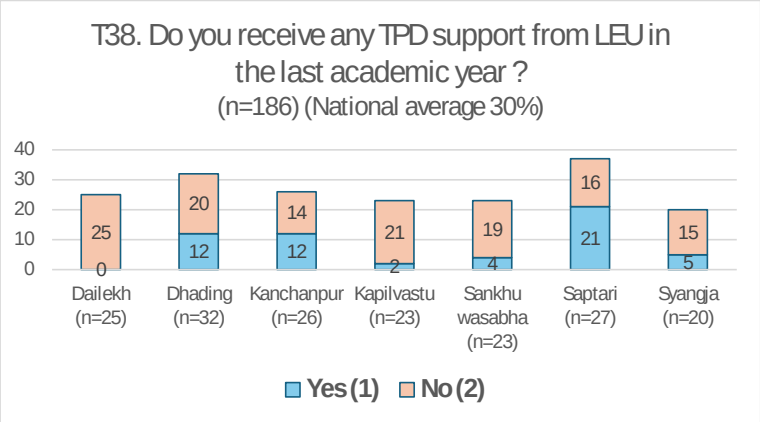
Table 1-79 and Figure 1-78 Did you receive any TPD support from LEU last academic year?

(n)

District	Yes (1)	No (2)	Total
Dailekh	0	25	25
Dhading	12	20	32
Kanchanpur	12	14	26
Kapilvastu	2	21	23
Sankhu	4	19	23
Saptari	21	16	37
Syangja	5	15	20
Total	56	130	186

(%)

District	Yes (1)	No (2)	Total
Dailekh	0%	100%	100%
Dhading	38%	63%	100%
Kanchanpur	46%	54%	100%
Kapilvastu	9%	91%	100%
Sankhuwasabha	17%	83%	100%
Saptari	57%	43%	100%
Syangja	25%	75%	100%
Total	30%	70%	100%



(35) From whom, how many times, and what support did you receive last academic year? (T39)

LEU Officer is dominant at Saptari (46%), and "Resource Person" is active at Kanchanpur (27%).

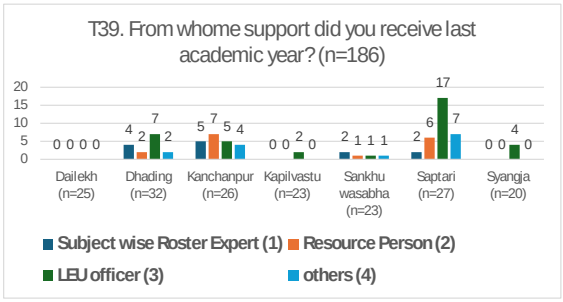
Table 1-80 and Figure 1-79 From whom, how many times, and what support did you receive last academic year?

(n)

District	Subject wise Roster Expert (1)	Resource Person (2)	LEU officer (3)	others (4)	n of teachers
Dailekh	0	0	0	0	25
Dhading	4	2	7	2	32
Kanchanpur	5	7	5	4	26
Kapilvastu	0	0	2	0	23
Sankhu	2	1	1	1	23
Saptari	2	6	17	7	37
Syangja	0	0	4	0	20
Total	13	16	36	14	186

(%)

District	Subject wise Roster Expert (1)	Resource Person (2)	LEU officer (3)	others (4)
Dailekh	0%	0%	0%	0%
Dhading	13%	6%	22%	6%
Kanchanpur	19%	27%	19%	15%
Kapilvastu	0%	0%	9%	0%
Sankhuwasabha	9%	4%	4%	4%
Saptari	5%	16%	46%	19%
Syangja	0%	0%	20%	0%
Total	7%	9%	19%	8%



(36) Opinion (Self-Evaluation) (T40-54)

The response with the most frequent response for each question is highlighted (in gray color).

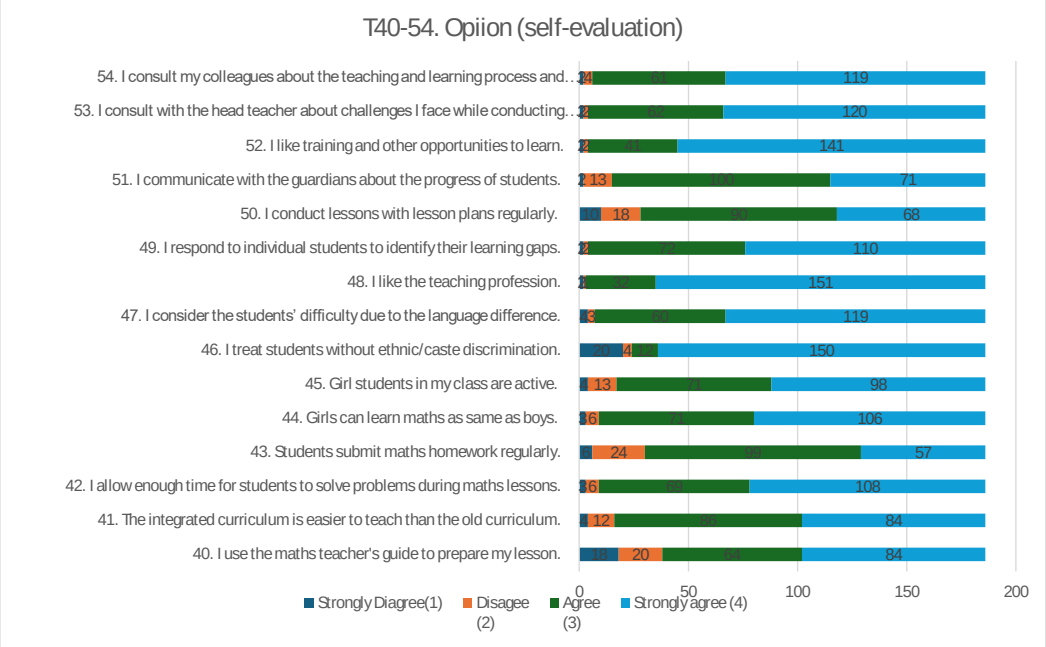
Table 1-81 and Figure 1-80 Opinion (Self-Evaluation)

(n)

NO. and Item	Strongly Diagree(1)	Disagee (2)	Agree (3)	Strongly agree (4)	n	Average
40. I use the maths teacher's guide to prepare my lesson.	18	20	64	84	186	3.15
41. The integrated curriculum is easier to teach than the old curriculum.	4	12	86	84	186	3.34
42. I allow enough time for students to solve problems during maths lessons.	3	6	69	108	186	3.52
43. Students submit maths homework regularly.	6	24	99	57	186	3.11
44. Girls can learn maths as same as boys.	3	6	71	106	186	3.51
45. Girl students in my class are active.	4	13	71	98	186	3.41
46. I treat students without ethnic/caste discrimination.	20	4	12	150	186	3.57
47. I consider the students' difficulty due to the language difference.	4	3	60	119	186	3.58
48. I like the teaching profession.	2	1	32	151	186	3.78
49. I respond to individual students to identify their learning gaps.	2	2	72	110	186	3.56
50. I conduct lessons with lesson plans regularly.	10	18	90	68	186	3.16
51. I communicate with the guardians about the progress of students.	2	13	100	71	186	3.29
52. I like training and other opportunities to learn.	2	2	41	141	186	3.73
53. I consult with the head teacher about challenges I face while conducting lessons	2	2	62	120	186	3.61
54. I consult my colleagues about the teaching and learning process and experience	2	4	61	119	186	3.60

(%)

NO. and Item	Strongly Diagree	Disagee	Agree	Strongly agree	"Strongly Disagree"+ "Disagree"	"Strongly Agree"+ "Aagree"
40. I use the maths teacher's guide to prepare my lesson.	10%	11%	34%	45%	20%	80%
41. The integrated curriculum is easier to teach than the old curriculum.	2%	6%	46%	45%	9%	91%
42. I allow enough time for students to solve problems during maths lessons.	2%	3%	37%	58%	5%	95%
43. Students submit maths homework regularly.	3%	13%	53%	31%	16%	84%
44. Girls can learn maths as same as boys.	2%	3%	38%	57%	5%	95%
45. Girl students in my class are active.	2%	7%	38%	53%	9%	91%
46. I treat students without ethnic/caste discrimination.	11%	2%	6%	81%	13%	87%
47. I consider the students' difficulty due to the language difference.	2%	2%	32%	64%	4%	96%
48. I like the teaching profession.	1%	1%	17%	81%	2%	98%
49. I respond to individual students to identify their learning gaps.	1%	1%	39%	59%	2%	98%
50. I conduct lessons with lesson plans regularly.	5%	10%	48%	37%	15%	85%
51. I communicate with the guardians about the progress of students.	1%	7%	54%	38%	8%	92%
52. I like training and other opportunities to learn.	1%	1%	22%	76%	2%	98%
53. I consult with the head teacher about challenges I face while conducting lessons	1%	1%	33%	65%	2%	98%
54. I consult my colleagues about the teaching and learning process and experience	1%	2%	33%	64%	3%	97%



1-3-4 Factorial Analysis of the Relationship between Test Results and Teacher's Responses

It is expected that the impact of the intervention on the student test score will occur by the route: Change in teachers' practice => Change in students' learning? => Change in students' test scores. These sequential changes should be examined in the mid-line and endline surveys. However, in order to examine the factors that influence this route, direct correlations between some teacher characteristics and students' test scores are examined in this section.

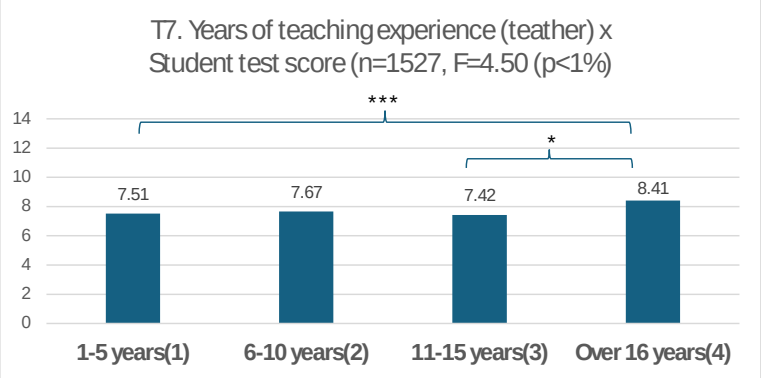
(1) Years of Teaching Experience (T7) x Student Test Score

The average test score by the titled factor is as follows. There is a statistically significant difference in the overall data. Specifically, statistically significant differences exist between "1-5 years (1)" ($p<1\%$) and "Over 16 years (4)" and between "11-15 years (3)" and "Over 16 years (4)" ($p<10\%$).

Table 1-82 and Figure 1-81 Years of Teaching Experience x Student Test Score

(n)

District	1-5 years(1)	6-10 years(2)	11-15 years(3)	Over 16 years(4)	Overall
Average	7.51	7.67	7.42	8.41	7.87
n	517	286	161	563	1527



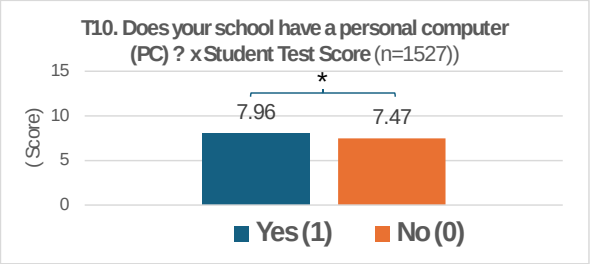
(2) Does your school have a personal computer (PC)? (T10) x Student Test Score x Student Test Score

The two-group average difference (t) test is as follows. There is a statistically significant difference at the 10% level. The effect size seems small.

Table 1-83 and Figure 1-82

Does your school have a personal computer (PC)? (T10) x Student Test Sore

Group	n	Average	S.D.	t	p	Judge(p)	Effect size (=(a)/(b))	Judge(ES)
Yes (1)	1229	7.96	4.57	1.70	0.09	*	0.11	Small
No (0)	298	7.47	4.36					
difference (a)>		0.50	4.53 <comb.SD (b)					



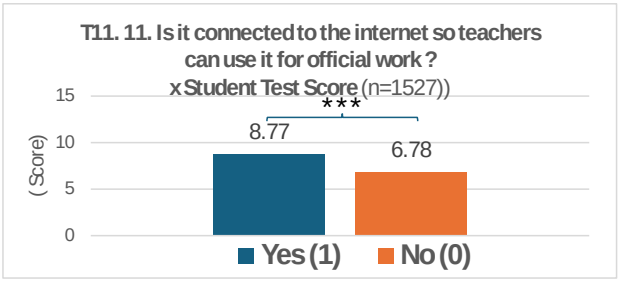
(3) Is it connected to the internet so teachers can use it for official work? (T11) x Student Test Score

The two-group average difference (t) test is as follows. There is a statistically significant difference at the 1% level. The effect size seems medium.

Table 1-84 and Figure 1-83

Is it connected to the internet so teachers can use it for official work? (T11) x Student test score

Group	n	Average	S.D.	t	p	Judge(p)	Effect size (=(a)/(b))	Judge(ES)
Yes (1)	836	8.77	4.55	8.74	<0.000	***	0.44	Medium
No (0)	691	6.78	4.27					
difference (a)>		1.99	4.53 <comb.SD (b)					



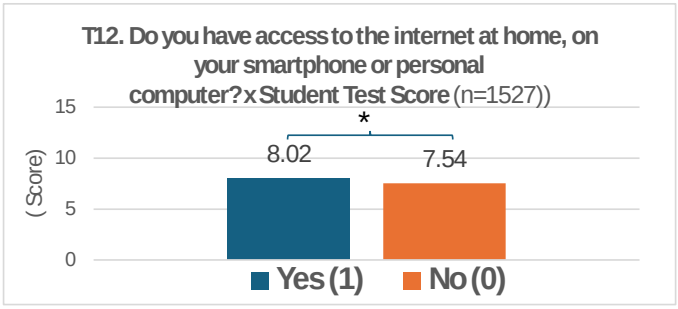
(4) Do you have access to the internet at home, on your smartphone or personal computer? (T12) x Student Test Score x Student Test Score

The two-group average difference (t) test is as follows. There is a statistically significant difference at the 10% level. The effect size seems small.

Table 1-85 and Figure 1-84

Do you have access to the internet at home, on your smartphone or personal computer? (T12) x Student Test Score

Group	n	Average	S.D.	t	p	Judge(p)	Effect size (=(a)/(b))	Judge(ES)
Yes (1)	1042	8.02	4.46	1.94	0.05	*	0.11	Small
No (0)	485	7.54	4.66					
difference (a)>		0.48	4.53 <comb.SD (b)					



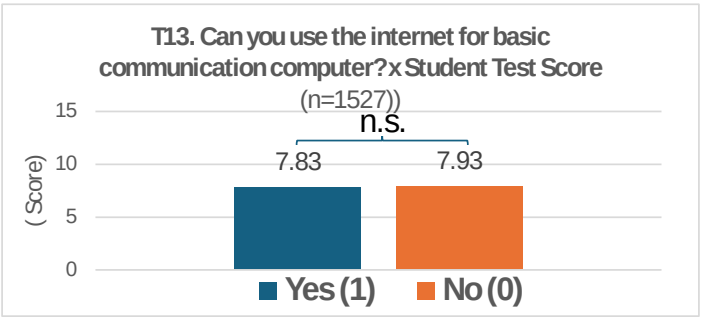
(5) Can you use the internet for basic communication on a computer? (T13) x Student Test Score

The two-group average difference (t) test is as follows. There is no statistically significant difference. The effect size seems negligible.

Table 1-86 and Figure 1-85

Can you use the internet for basic communication on a computer? (T13) x Student Test Score

Group	n	Average	S.D.	t	p	Judge(p)	Effect size (=(a)/(b))	Judge(ES)
Yes (1)	1040	7.83	4.48	−0.3921	0.6952	n.s.	−0.02	Negligible
No (0)	487	7.93	4.64					
difference (a)>		−0.10	4.53 <comb.SD (b)					



(6) Did you attend a TPD certification training (phase 1)? (T14) x Student Test Score

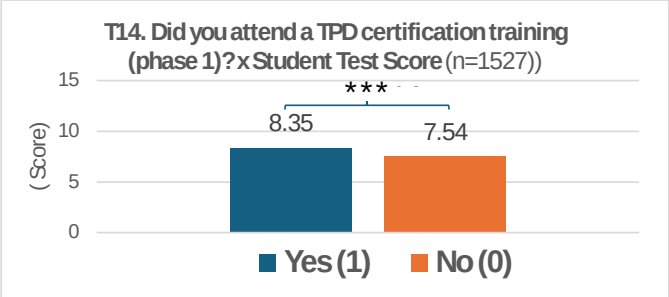
The two-group average difference (t) test is as follows. There is a statistically significant difference at the 1% level. The effect size seems small - medium.[18]

Table 1-87 and Figure 1-86

[18] There is no statistically significant difference in whether permanent or temporary teachers are related to student test scores.

Did you attend a TPD certification training (phase 1)? (T14) x Student Test Score

Group	n	Average	S.D.	t	p	Judge(p)	Effect size (=(a)/(b))	Judge(ES)
Yes (1)	614	8.35	4.69	3.401	0.0007	***	0.18	Small~Med.
No (0)	913	7.54	4.40					
difference (a)>		0.802	4.53 <comb.SD (b)					



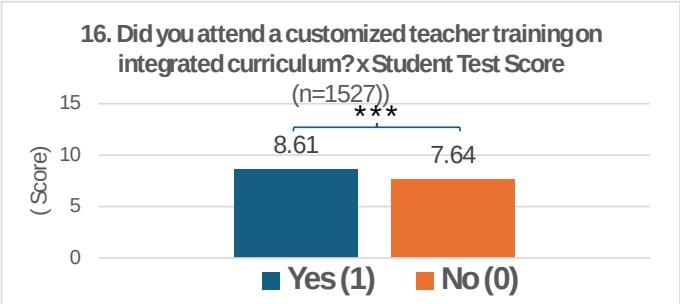
(7) Did you attend a customized teacher training on integrated curriculum? (T16) x Student Test Score

The two-group average difference (t) test is as follows. There is a statistically significant difference at the 1% level. The effect size seems small - medium.

Table 1-88 and Figure 1-87

Did you attend a customized teacher training on integrated curriculum? (T16) x Student Test Score

Group	n	Average	S.D.	t	p	Judge(p)	Effect size (=(a)/(b))	Judge(ES)
Yes (1)	357	8.61	4.45	3.533	0.0004	***	0.21	Small~Med.
No (0)	1,170	7.64	4.54					
difference (a)>		0.965	4.53 <comb.SD (b)					



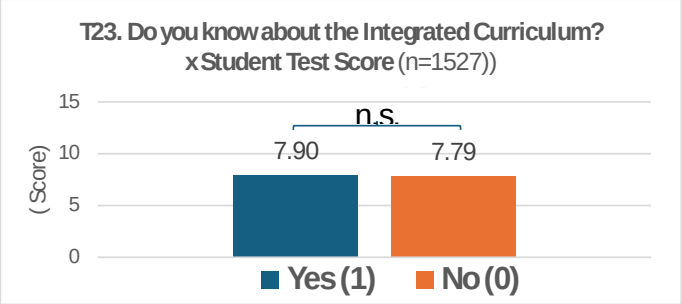
(8) Do you know about the Integrated Curriculum? (T23) x Student Test Score

The two-group average difference (t) test is as follows. There is no statistically significant difference. The effect size seems negligible.

Table 1-89 and Figure12-88

Do you know about the Integrated Curriculum? (T23) x Student Test Score

Group	n	Average	S.D.	t	p	Judge(p)	Effect size (=(a)/(b))	Judge(ES)
Yes (1)	1,069	7.90	4.58	0.41	0.68	n.s.	0.02	Negligible
No (0)	458	7.79	4.42					
difference (a)>		0.10	4.53 <comb.SD (b)					



1-3-5 Multiple Regression (Tentative, before interventions)

(1) Teacher's Self-Evaluation and Student's Test Score

As the final analysis, multiple regression analysis is conducted. In order to control the difference in the situation between districts, the following coding matrix is developed and included in the regression analysis. Saptari district is set as the standard because the sample size is the largest among the seven districts, so it would be the most stable.

Table 1-90 District Code Matrix

District name	Dst1	Dst2	Dst3	Dst4	Dst5	Dst6	Dst7
Dailekh	1	0	0	0	0	0	0
Dhading	0	1	0	0	0	0	0
Kanchanpur	0	0	1	0	0	0	0
Kapilvastu	0	0	0	1	0	0	0
Sankhuwasabha	0	0	0	0	1	0	0
Saptari	0	0	0	0	0	0	0
Syangja	0	0	0	0	0	0	1

(Source) IBSE team

The responses for Opinion (self-evaluation) (Question No.40-54) are included as explanation variables. 9 variables from them are not statistically significant at a 1% level. Three variables (T44, T51, 53) have positive coefficients, and two variables (T49, T52) have negative coefficients. The reason should be examined.

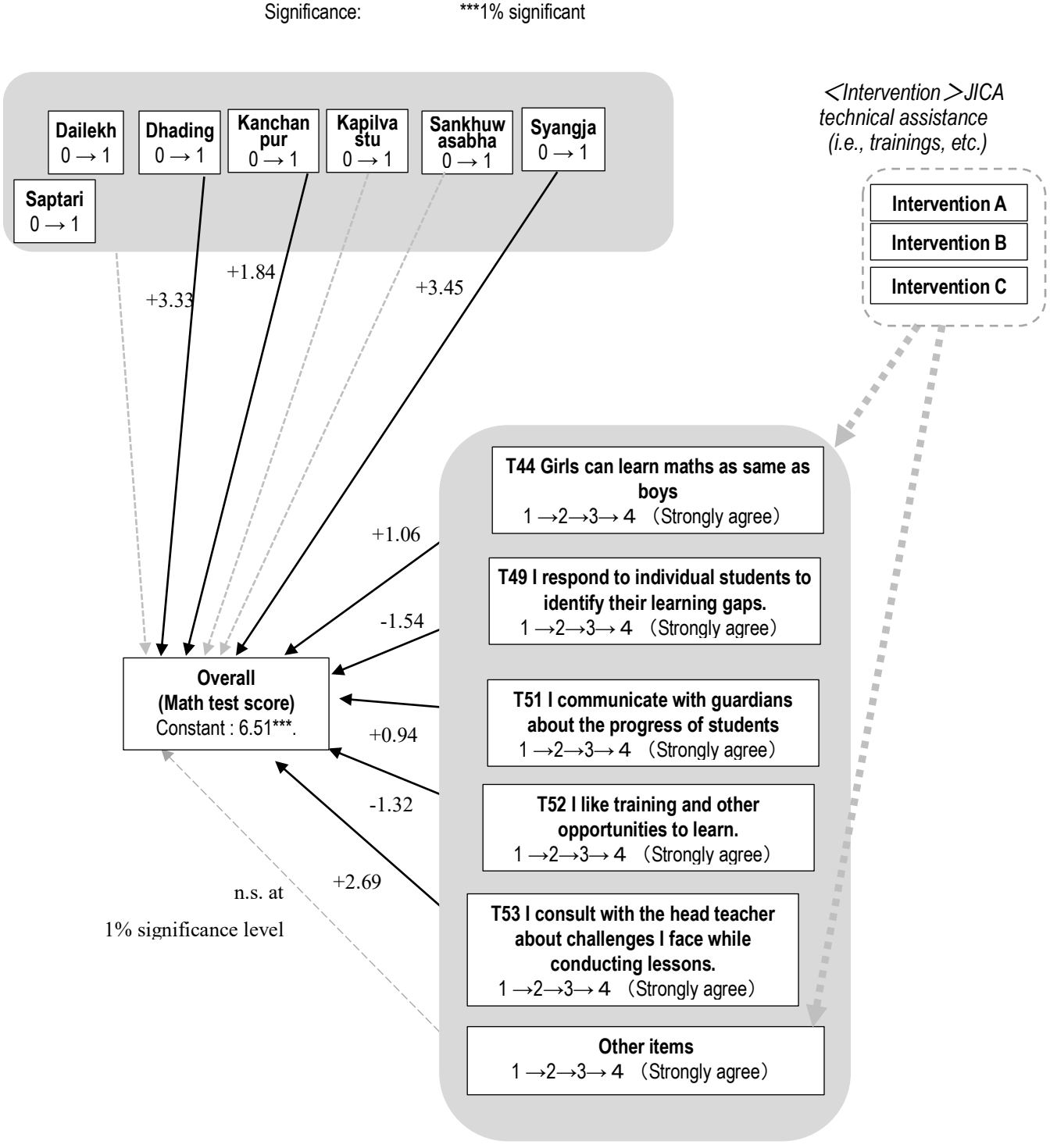
Table 1-91 Multiple Regression Analysis (Tentative, before interventions)

Dependent variable (i.e., Y): Overall (Math test score) n=1,527, R2=0.2144, F=19.56 (p<0.000)

	Response choices	Coefficient	Std. err.	t	p	Star
Dst1	0→1Dailekh	−0.92	0.40	−2.30	0.022	
Dst2	0→1Dhading	3.33	0.39	8.47	0.000	***
Dst3	0→1Kanchanpur	1.84	0.46	4.02	0.000	***
Dst4	0→1Kapilvastu	−0.91	0.39	−2.37	0.018	
Dst5	0→1Sankhuwasabha	0.96	0.44	2.17	0.030	
Dst6	0→1Saptari	0.00 (omitted)				
Dst7	0→1Syangja	3.45	0.42	8.25	0.000	***
T_A_40_TGuse	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−0.37	0.16	−2.28	0.023	
T_A_41_Iceasy	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−0.54	0.22	−2.43	0.015	
T_A_42_AllowTime	1 (Strongly Disagree)→2→3→4(Strongly Agree)	0.05	0.25	0.21	0.831	
T_A_43_HWregular	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−0.01	0.18	−0.07	0.941	
T_A_44_GirlsSame	1 (Strongly Disagree)→2→3→4(Strongly Agree)	1.06	0.26	4.11	0.000	***
T_A_45_GirlsActive	1 (Strongly Disagree)→2→3→4(Strongly Agree)	0.02	0.18	0.09	0.930	
T_A_46_Discrimination	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−0.05	0.14	−0.37	0.708	
T_A_47_Language	1 (Strongly Disagree)→2→3→4(Strongly Agree)	0.37	0.26	1.43	0.152	
T_A_48_LikeTeadhing	1 (Strongly Disagree)→2→3→4(Strongly Agree)	0.01	0.33	0.02	0.984	
T_A_49_RespondGap	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−1.54	0.29	−5.23	0.000	***
T_A_50_LessonPlan	1 (Strongly Disagree)→2→3→4(Strongly Agree)	0.05	0.16	0.29	0.769	
T_A_51_Guardian	1 (Strongly Disagree)→2→3→4(Strongly Agree)	0.94	0.20	4.72	0.000	***
T_A_52_LikeLearning	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−1.72	0.30	−5.65	0.000	***
T_A_53_ConsultHT	1 (Strongly Disagree)→2→3→4(Strongly Agree)	2.69	0.36	7.37	0.000	***
T_A_54_ConsltColleagues	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−0.73	0.31	−2.37	0.018	
_cons		6.51	1.16	5.63	0.000	***

(Note)*** 1% significance

Figure 1-89 Multiple Regression Analysis (Tentative, before interventions)



n=1,527. R2=0.2144, F=19.56 ($p<0.001$)

1-4 Subject wise result[19] (Nepali, English and Hamro Serofero)

1-4-1 Nepali

(1) Result of questionnaire survey

A survey was conducted on the integrated curriculum for grades 1–3, focusing on Mero Nepali workbooks, teacher guide, teaching materials, and assessment processes. For this, representatives from 7 provinces selected 2 LGs each, under which one school was chosen from each, resulting in a total of 28 teachers teaching Mero Nepali for grades 1–3 completing a questionnaire to gather data.

Overall, while the Mero Nepali workbooks are found to be useful and practical for the development of linguistic skills, challenges such as a lack of necessary training, inadequate physical infrastructure, and time management issues have made its effective implementation difficult. The data and the key findings are outlined below:

Q1 How supportive are the lessons in the Mero Nepali workbooks for the level-based competency development determined by the curriculum?

Table 1-92 Supportive lessons of the workbook

District	Fully supportive (1)	Partially supportive (2)	Not supportive (3)
Kanchanpur	3	1	0
Dailekh	5	0	0
Kapilvastu	4	0	0
Syangja	1	2	0
Dhading	2	0	0
Saptari	3	2	0
Sankhuwasabha	1	4	0
Total	**19 (68%)**	**9 (32%)**	**0**

Key findings:

a) **Overall Support**: The majority of teachers responded with a total of **68%** being fully supportive, and **32%** being partially supportive. No district falls under the "Not supportive" category.

b) **District Highlights**:

- **Dailekh** and **Kapilvastu** were supported ‘fully supportive' (5 and 4, respectively), with no partial or non-supportive responses.
- **Syangja** has a mixed response, with 1 fully supportive and 2 partially supportive.
- **Saptari** and **Sankhuwasabha** responded partially supportive with some fully supportive responses as well.
- No district reports being completely "Not supportive."

[19] For example, in nine surveyed schools in Kanchanpur, all the teachers teach different subjects in grades 1- 3. There is no grade teaching in the surveyed schools—all schools applying for the subject teaching. Without sufficient teacher grade teaching is not possible. In current practice, there is no regular communication with each other. Sometimes teachers personally, or in staff meetings, and another type of in-school meetings, each subject teacher communicates with each other. So as per their response, they need some training about effective communication with each other.

Q2 Do the vocabulary used in the Mero Nepali workbooks for grades 1–3 encompass gender, ethnic, and geographical equality?

Table 1-93 Encompass of gender, ethnic, and geographical equality

District	Fully encompasses (1)	Partially encompasses (2)	Does not encompass (3)
Kanchanpur	3	1	0
Dailekh	1	4	0
Kapilvastu	1	3	0
Syangja	2	1	0
Dhading	1	1	0
Saptari	0	5	0
Sankhuwasabha	0	5	0
Total	**8 (29%)**	**20 (71%)**	**0**

Key findings:

a) **Overall Coverage of Gender, Ethnic, and Geographical Equality**:
   - A majority of the data (71%) report that the vocabulary **partially encompasses** gender, ethnic, and geographical equality.
   - Only **29%** believe the vocabulary in the workbooks **fully encompasses** these aspects, with no districts reporting that the workbooks **do not encompass** these values at all.

b) **District-Specific Insights**:
   - **Kanchanpur** is the only district with some level of full coverage (3 fully encompassed, 1 partially).
   - **Dailekh**, **Kapilvastu**, **Saptari**, and **Sankhuwasabha** all show a lack of full coverage, with more districts reporting partial coverage.
   - **Syangja** and **Dhading** show a more balanced distribution, with some districts reporting full and others partial coverage.

c) **Key Takeaway**: While no district reports that the workbooks do not encompass gender, ethnic, or geographical equality at all, the majority indicate that the vocabulary **partially** includes these aspects, signaling room for improvement in fully encompassing these critical issues in the workbooks.

Q3 Are the exercises under functional grammar in the workbooks for the basic level (grades 1–3) sufficient for the development of linguistic skills?

Table 1-94 sufficiency of functional grammar exercises

District	Yes (1)	No (2)
Kanchanpur	3	1
Dailekh	2	3
Kapilvastu	4	0
Syangja	3	0
Dhading	2	0
Saptari	1	4
Sankhuwasabha	3	2
Total	**18 (64%)**	**10 (36%)**

Key findings:

a) **Overall Sufficiency**:
   - **64%** believe that the exercises in functional grammar are sufficient for the development of linguistic skills.
   - **36%** feel that the exercises are **not sufficient**.

b) **District-Specific Insights**:
   - **Kapilvastu** reports all (4) agreeing that the exercises are sufficient, indicating strong satisfaction in that district.
   - **Saptari** is the only district where the majority (4) feel the exercises are not sufficient, with just 1 district saying they are sufficient.
   - **Kanchanpur**, **Syangja**, **Sankhuwasabha**, and **Dhading** show a fairly positive response with more data saying "Yes" than "No" for sufficient exercises, though the responses vary in each district.
   - **Dailekh** also shows a mix of responses, with more districts reporting that the exercises are insufficient.

c) **Key Takeaway**: While the majority of data (64%) consider the exercises sufficient, there is still a significant portion (36%) that believes the exercises do not meet the needs for developing linguistic skills. This suggests a potential need for further improvement in grammar exercises.

Q4 Is the integrated curriculum supportive for the development of linguistic skills related to the Nepali language?

Table 1-95 Supportive for the development of linguistic skills

District	Yes (1)	No (2)
Kanchanpur	4	0
Dailekh	5	0
Kapilvastu	2	2
Syangja	3	0
Dhading	2	0
Saptari	5	0
Sankhuwasabha	5	0
Total	**26 (92%)**	**2 (8%)**

Key findings:

a) **Overall Support**:
   - 92% believe that the integrated curriculum is supportive for the development of linguistic skills.
   - Only 8% think that the curriculum is not supportive.

b) **District-Specific Insights**:
   - **Dailekh**, **Saptari**, and **Sankhuwasabha** are particularly strong in their support (5 in each) agreeing that the integrated curriculum is supportive.

- **Kanchanpur** and **Syangja** also have a high level of support, with most agreeing that it is supportive.
- **Kapilvastu** and **Dhading** show a mixed response, where some data think it is supportive and others do not.

c) **Key Takeaway**: The integrated curriculum is overwhelmingly viewed as supportive in the majority, with only a small fraction (8%) feeling that it is not helpful for the development of linguistic skills. This indicates that the curriculum is largely seen as effective in promoting linguistic skills in Nepali.

Q5 Is the language used in the workbooks for grades 1–3 at the basic level appropriate in terms of its level?

Table 1- 96 Language used in the workbooks

District	Yes (1)	No (2)
Kanchanpur	4	0
Dailekh	5	0
Kapilvastu	4	0
Syangja	3	0
Dhading	2	0
Saptari	5	0
Sankhuwasabha	4	1
Total	**27 (96%)**	**1 (4%)**

Key findings:

a) **Overall Appropriateness**:
- 96% believe that the language used in the workbooks is appropriate for grades 1- 3.
- Only 4% feel that the language is not appropriate for the level.

b) **District-Specific Insights**:
- **Dailekh**, **Saptari**, and **Sankhuwasabha** all show strong agreement, with all districts (5 in each) finding the language appropriate, except for one district in **Sankhuwasabha**.
- **Kanchanpur**, **Kapilvastu**, and **Syangja** also report high levels of approval, with a mix of "Yes" responses across districts.
- **Dhading** is the only district with a mixed response, where one district feels the language is not appropriate.

c) **Key Takeaway**: The vast majority (96%) agree that the language used in the workbooks is well-suited to the grade level, indicating that the workbooks are largely accessible and understandable for students in grades 1–3.

Table 1-97 Qualitative data and key findings

District	Q6 What problems have Nepali language teachers faced when teaching Mero Nepali to students whose mother	Q7 What types of educational materials related to language do you use as directed in the teacher's guide?	Q8 Apart from the workbooks, what other materials related to language and grammar do you use?	Q9 Have you faced any problems related to Nepali language subjects based on the integrated curriculum?	Q10 Do you have any suggestions or feedback regarding the integrated curriculum, Mero Nepali workbooks, teacher's guide,

	language is not Nepali? Please mention a few points.				etc.?
Kanchanpur1	No problem	Using letter cards, sentence cards and Barna cards	Using letter cards, Pocket charts		No any
Kanchanpur2	Difficulty in Nepali pronunciation for non-Nepali native language student	Using letter cards, sentence cards, Charts and Models while teaching Nepali	Letter cards, sentence cards, charts and models		No any
Kanchanpur3	Difficulty in speaking Nepali for other native language students like Tharu, Doteli	Using letter cards, sentence cards while teaching	using reference materials, word cards, letter cards		No any
Kanchanpur4	Pronunciation problem	Using sentence cards, Meaning cards, word cards, charts, figures	Using Video of narratives, video of poems, video of child songs	Problems to give mathematical contents in Nepali	workbook is heavy in comparison to student knowledge level
Dailekh1		Not yet	Not yet	Should have provide TG to schools and teachers	Easy access for TLM in classroom
Dailekh2		Not yet	Not yet	Should have provided TG to schools and teachers	Easy access for TLM in classroom
Dailekh3		Unknown	Not yet	Internet access	
Dailekh4		Not yet	Not yet		
Dailekh5		Yes, it is color full and enough exercise activities.		Have not any idea for colors, symbols and teaching methodology and don't have clear idea and concept on IC.	
Kapilvastu1	Language barrier to understand Nepali well		Word card, Sentence card, Pocket card and table Word card, Picture card, Letter card and pocket table		Language
Kapilvastu2	Language barrier		Word card, Sentence card, Pocket Table, Word card, sentence card, picture card, pocket table		Language
Kapilvastu3	Difficulty on facilitation word meaning in Nepali due to language		Word card, Sentence card, Pocket Table, Child stories, child songs		The content is higher than the student level and age
Kapilvastu4	Language barrier on understanding Awadhi language		Picture, Drawing, Local educational materials		Difficulty in understanding Language
Syangja1	speaking some	word card,	I use visual		please give priority

	letters is difficult for the students from Magar and Newar community	sentence card, and other audio and visual student and teachers made materials	materials		for the trainings
Syangja2	no students with different language speaking so there is no problem	videos through mobile, and interesting story telling	word cards, sentence cards, and the books of poem, story, jokes, articles available in library		timely availability of teacher's guidance along with books
Syangja3	reading and learning skills in challenging	language barrier and some words are complicated to understand	words and vocabulary		books or curriculum should be made within the context
Dhading1	Errors in speech,	Word cards, sentence cards, picture cards, charts, and Nepali Alphabetical set with vowel sound	Books about stories and poem, exercise book	Teaching by integrating with other subjects is difficult.	Subject-specific training,
Dhading2	Problems in pronunciation	Word cards, sentence cards, picture cards	story book, figure, reference materials, exercise book	Running on the integrated curriculum, student evaluation, and record-keeping.	Although the teacher's guide mentions a one-hour duration for lesson planning, the school has allocated a 45-minute period.
Saptari1	Maithili spoken student challenges to learn Nepali.	Use the letter charts for student learning	telling the story		No availability of workbook in school
Saptari2	The teaching learning instruction Nepali medium, student aren't understood.	use the newspaper for letter knowledge	Grammar chat use	Lack of Integrated training	Lack of Integrated training difficulty to teach
Saptari3	Difficulty on instruction in Nepali. Practicing in Maithili language in first instruction	Story books	poem books	The Nepali words are difficult to student understanding	As per lesson need to develop TG
Saptari4	Challenges to understand Nepali language to the student	Available cards in the school	Pictures		No available workbook in school
Saptari5	Facing challenges on teaching and student understanding	Pictures, discussion on friends	Pictures discussion		There is on workbook in the school
Sankhuwasabha1	In speaking and writing skills, many wrong due to language	Words patti, Pictures and posters etc.	Besides the workbook and TG no other materials and books used in classroom		Should be clear and colorful pictures in workbook according to the lesson
Sankhuwasabha2	Difficult to right pronunciation	Lack of TG every lesson difficulty for teach	Used Words patti and letter patti etc.	Lack of TG and similar types of lessons are in the workbook, but students are from	Should provide TG

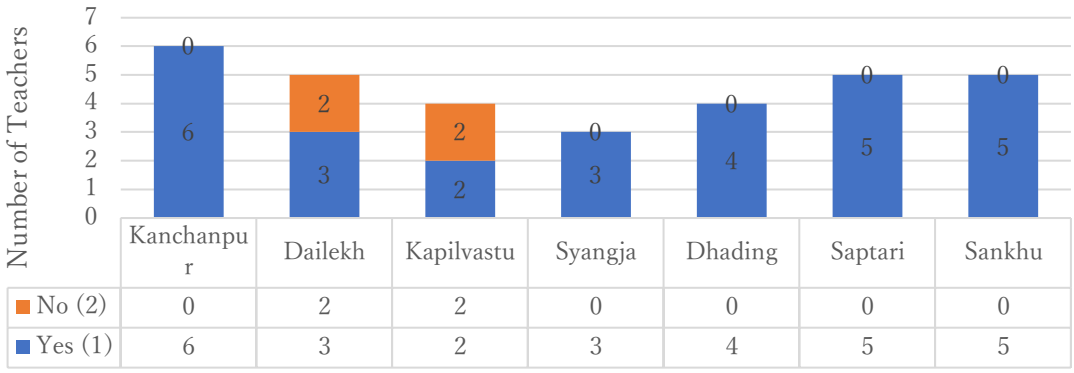
				different caste, cultures and communities, so many challenges are faced	
Sankhuwasabha3	Students cannot right write and speak so very difficult to teach them	TG are not available at the school	No any materials used except workbook		It would be better if educational materials are available at school
Sankhuwasabha4	Difficult to pronounce and speak due to their mother tongue	TG are not available at the school so not used yet	No any materials used except workbook		Should be available more exercises in the workbook for develop the writing skills of students
Sankhuwasabha5	Problem to teach due to right pronunciation of students	TG are not available at the school so not used yet	No any materials used except workbook		Should be more exercises text in the book for develop the writing skills

1-4-2 English

(1) Integration of English with Other Subjects

The data in Figure 1-90 represents 32 English teachers from seven districts. The responses to the question "Do you integrate English subject content with other subjects during instruction?" are as follows. The overall response for "yes" is 88%, and for "no" is 13%. A few teachers in Dailekh and Kapilvastu report that they do not integrate English subject content with other subjects during instruction.

Figure 1-90 Do you integrate English subject content with other subjects during instruction?



The examples of integration cited as evidence reveal limited types of integration of English with other subjects across six districts.

The responses from teachers in Kanchanpur suggest that they primarily integrate English with Nepali language skills and "Serofero", with limited evidence of broader interdisciplinary connections. The

methods of integration are not clearly articulated. Further clarification is needed to understand fully how these teachers integrate English with other subjects. Only one English teacher in Dailekh reported having integrated English with "Serofero" using the theme "Me and My Family." However, how integration takes place is still unclear. This suggests that the integration practices in this district are extremely limited."

In Kapilvastu, two teachers reported that they integrated English with the local language, Nepali and other subjects, using theme-based teaching like "Me and My Family". This indicates some cross-curricular connections, but primarily within language-related areas. Three teachers in Syangja reported that they integrate English "where possible," connecting it to various subjects like Maths (addition, subtraction), Social Studies (socialization), and Health, often based on the situation and context. They specifically mention trying to integrate Math and Science, suggesting a more intentional effort toward interdisciplinary connections. However, they have not provided specific examples of integration.

Teachers in Dhading reported that they integrate English with Nepali and Math, using shapes and colors within a Nepali context. They connect word formation to "Serofero," Nepali, and Math. They also teach family members, relationships, age, and behavior, linking these concepts to counting (Math) and time-telling. These teachers seem to have a conceptual understanding of integration, particularly with Math and Nepali. Teachers in Saptari integrate English with Math (family members and numbers) and Social Studies. They use Nepali for translation (e.g., apple = स्याउ (and connect English to Math by asking questions about family size. This approach uses translation and real-world contexts to reinforce learning.

Teachers in Sankhuwasabha generally integrate English with other subjects, using English numbers during counting instead of Devanagari numerals. They link "My Family" theme with "Serofero" content and teach English and Nepali months together. This shows a focus on practical, everyday applications of English and integration with Nepali language and culture.

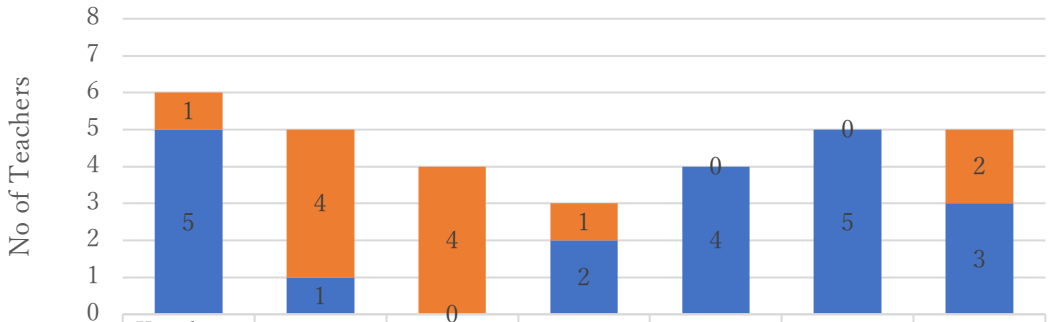
The data reveals a range of integration practices, from limited and unclear connections (Dailekh) to more intentional and structured approaches (Dhading, Syangja). The integration primarily focuses on connecting English with Nepali, Maths, and Searofero. "Serofero" is mentioned in several districts, suggesting it plays a role in their teaching, although its precise nature is unclear. The methods of integration vary, including theme-based teaching, translation, contextual connections, and practical applications. The responses highlight the need for clearer guidelines and potential professional development to support teachers in effectively integrating English with other subjects.

(2) Integration of Language Skills and Aspects

The data in Figure 1-91 represent 32 English teachers from seven districts. The responses to the question “Do you integrate language skills and aspects in classroom instruction?” are as follows. The overall

response for “yes” is 63%, and 38% is “no”.

Figure 1-91: Do you integrate language skills and aspects in classroom instruction?



	Kanchanpur	Dailekh	Kapilvastu	Syangja	Dhading	Saptari	Sankhu
No (2)	1	4	4	1	0	0	2
Yes (1)	5	1	0	2	4	5	3

The teachers' responses regarding integrating language skills in classroom instruction highlight a variety of strategies. A common approach among teachers is to incorporate all four language skills (listening, speaking, reading, and writing) in every lesson, often teaching them "in parallel." This suggests a move away from isolated skill instruction towards a more holistic approach where skills are developed interdependently.

Teachers employ various techniques, including stories and texts, visual and audio materials, and activity-based teaching. This indicates an effort to engage students through varied modalities. Speaking practice is clearly prioritized. Teachers use strategies like asking questions (individually and in groups), encouraging students to speak aloud, and having them tell stories. This highlights the importance of creating opportunities for students to use the language actively in the classroom.

Reading and writing are also incorporated through activities like having students read aloud, listen to their peers read, and then write about the content. This suggests a focus on connecting reading and writing skills and using reading as a springboard for writing activities.

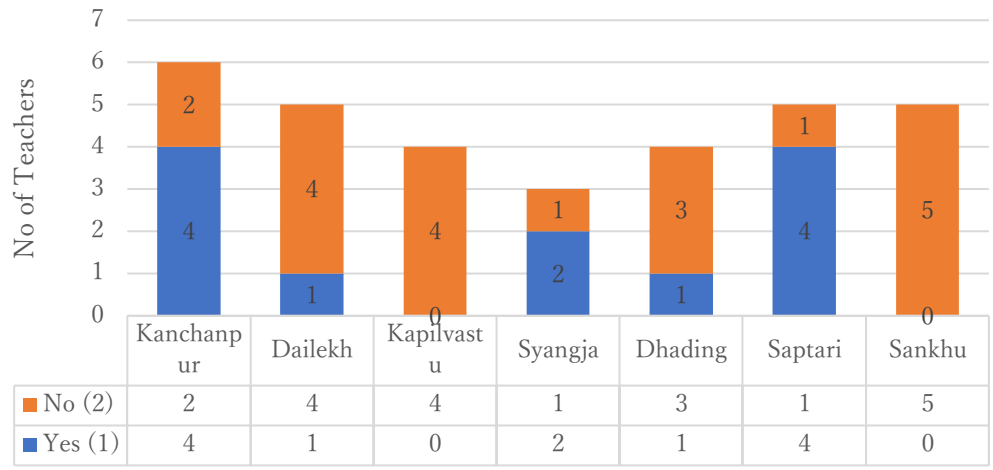
They use the local language when students don't understand, employ other Teaching Learning Materials (TLM), and practice speaking in students' native language to bridge the gap between familiar and new language. This highlights an awareness of students' diverse linguistic backgrounds and learning needs. Teachers emphasize the importance of clear pronunciation by speaking loudly and correctly and explicitly teaching appropriate pronunciation. This reflects a focus on developing students' pronunciation skills.

In summary, the responses reveal a focus on integrated skills instruction, active learning strategies, speaking practice, varied techniques and materials, and clear pronunciation. Teachers are actively engaging students in all four language skills, using a variety of methods to cater to diverse needs and promote language development.

(3) Training

The data in Figure 1-92 represent 32 English teachers from seven districts. The responses to the question "Have you received any training in integrated curriculum teaching and learning?" are as follows. The overall response for "yes" is 37.5 %, and 62.5% is "no". This indicates that the majority of English teachers have not received any training on the integrated curriculum till now, indicating challenges for the implementation of the newly introduced curriculum in the classroom.

Figure 1-92 Have you received any training in integrated curriculum teaching and learning?



	Kanchanpur	Dailekh	Kapilvastu	Syangja	Dhading	Saptari	Sankhu
No (2)	2	4	4	1	3	1	5
Yes (1)	4	1	0	2	1	4	0

The further question, "If you have received training, have you used the knowledge, skills, and techniques acquired in training in the classroom?" was asked of the teachers who received integrated curriculum training. Among 12 teachers who received training on integrated curriculum, only 9 reported that they had used the knowledge they learned in training in their classroom instruction. Three other teachers said that they had not used it in classroom practice; a further question was asked, "If not, what has prevented you from using it?" The responses from the teachers indicated that they did not get support from the local government, and they did not get any administrative support to implement the intent of the curriculum in the school.

(4) Responding to the Diverse Learning Needs

The responses to the question "What specific strategies do you use to address diverse learning needs of students in teaching English?" reveal a variety of strategies employed by teachers to address diverse learning needs in English lessons. They are described below.

First, teachers stress the importance of creating an inclusive classroom environment. They mention considering students' language, ethnicity, and gender during teaching-learning. Their responses reveal that they make an effort to treat all students equally. This suggests an awareness of the social and cultural factors that can influence learning and a commitment to creating a respectful and supportive classroom. Second, a common approach mentioned by teachers is to incorporate audio-visual aids**,** such as a projector, pictures, word charts, and demonstrations. Multisensory presentation of the lesson can support students with different learning styles and make content more accessible, especially for students with varying levels of language proficiency.

Third, teachers also emphasize the use of teaching-learning materials (TLM) and project work to provide hands-on, engaging learning experiences. The teachers mention teaching in the student's language or using a mix of Nepali and English as an attempt to bridge language barriers, especially in the early grades.

Fourth, teachers in the study were also reported to have used techniques like questioning, discussion, prizes, and feedback to encourage active participation. One of the teachers specifically mentions providing remedial teaching for low-performing students.

(5) Implementation Challenge

The teachers' responses to the survey question “Which aspect of integrated curriculum in English do you find most challenging to implement?" reveal several interconnected challenges in implementing integrated curriculum (IC) in English. They are described below.

First, a significant number of teachers find it difficult to develop language skills in the students. Listening and speaking are the primary language skills and reading and writing are the secondary language skills. The teachers' difficulty in teaching primary language skills might be due to English being the second/foreign language. Additionally, a lack of resources (audio/video materials) and potentially their own training in these areas. Other specific skill challenges include spelling, word formation, sentence construction, pronunciation, reading, vocabulary, grammar, and comprehension. This highlights the need for targeted support and resources to develop these crucial language skills. Paragraph writing and letter writing are mentioned explicitly as challenging, particularly for younger students. This highlights the need for focused instruction and scaffolding in developing these writing skills.

Second, teachers find integrating English with other subjects challenging, likely due to a lack of training in interdisciplinary approaches. This suggests a need for professional development focused on how to connect English language learning with content from other subject areas.

Third, participant teachers mention students' low English proficiency and the influence of the local language as significant barriers. This includes difficulty with basic concepts, understanding new topics and vocabulary, and general language comprehension.

Fourth, some teachers find the content too advanced or the volume of material too high, creating challenges in pacing and student comprehension. This suggests a potential mismatch between the curriculum and students' developmental level and a need for curriculum review or additional support materials.

Fifth, a recurring theme from the study is the lack of adequate training on the integrated curriculum, impacting their pedagogical approach and ability to integrate the curriculum effectively. This emphasizes the urgent need for comprehensive professional development focused on integrated curriculum implementation.

Sixth, irregular student attendance and students' struggle to learn English create additional challenges in aligning instruction and ensuring consistent progress. This calls for strategies to improve attendance and address foundational skills gaps.

The teachers' responses from this study point to a need for more training on integrated curriculum, targeted resources for specific skill development (especially listening, speaking, and writing), strategies for integrating English with other subjects, support for students with varying language proficiency levels, and potentially a review of the curriculum content and volume. Addressing these challenges would significantly improve teachers' ability to implement the integrated curriculum effectively.

(6) Credit Hours

Teachers' responses to the questions "How many hours per week are specified for teaching English in your school (grades 1-3)? Is it sufficient to meet curricular goals?" revealed that schools were not consistent in providing time for English subject lessons. The prescribed time for teaching English subjects in the study schools ranged from 4 to 6 hours per week, although the curriculum has made provision for only four credit hours to teach English. This clearly shows a preference for teaching English. However, they indicated that this allotted time was insufficient to adequately cover the curriculum and meet student learning needs. They provided four reasons for the insufficiency of allocated time. First, the teachers in Kanchanpur, where classrooms were overcrowded, said that time was insufficient because of the number of students in class to support their needs. Second, provided credit hours are not sufficient for developing the expected proficiency by the curriculum, particularly for struggling learners. Third, a teacher in Dhading mentioned that prescribed credit hours are not enough to simultaneously teach, assess, and keep a record of all students' learning profiles. Fourth,

teachers from Sankhuwasabha reported that the prescribed credit hours are not enough because the content in the curriculum is vague and lengthy for the age group, which leaves very little time for the revision and support of struggling learners because teachers have to speed up to complete the course.

(7) Collaboration with Stakeholders

Responses from teachers for the question "Do you collaborate with other stakeholders for teaching English? If yes, please give an example in short." reveal the use of collaboration for support in teaching English. They are described below.

First, collaboration with the other teachers is the dominant form of collaboration, as mentioned by most of the respondents. Teachers collaborate with senior teachers, teachers from higher grades, other English teachers within the school, and generally "other subject teachers." This suggests a peer-to-peer support system where teachers share knowledge, clarify content and discuss teaching strategies. It highlights the importance of collegial relationships within the school. However, this type of collaboration is more informal than structured.

Second, some teachers mention consulting with "education experts" from their own or other schools. This indicates a desire for external input and specialized knowledge, although it's not clear how frequently or formally this occurs. The mention of "subject experts" reinforces this need for specialized guidance.

Third, most of the teachers in the survey mention discussion/interaction or consultation with the Head Teacher (HT). This suggests the HT plays a role in instructional leadership and provides support to English teachers.

Fourth, teachers reported that they collaborate extensively within their schools. There is little mention of collaboration with external stakeholders beyond experts from other schools. Notably absent are mentions of collaboration with parents (except for one instance), the local community, or other external organizations.

Fifth, their collaboration aims to focus on content clarification and improving teaching strategies. The examples provided by a few teachers suggest that collaboration primarily focuses on clarifying subject matter content ("what to teach," "topics I am not familiar with," "confused content") and asking for teaching approaches. This highlights the importance of content knowledge and pedagogical strategies in their collaborative efforts.

Sixth, the language used in participants' responses, such as "discussing," "asking," and "if not clear," suggests that collaboration is often informal, ad-hoc, and driven by immediate needs. There's less indication of structured or regular collaborative activities. There's limited evidence of broader

engagement with external stakeholders, and the collaboration appears to be primarily focused on content clarification and teaching strategies rather than other aspects of curriculum implementation or student support.

(8) Required Support

The responses collected from 32 English teachers for the question "What specific support (if any) do you need to implement the integrated curriculum in English?" reveal four key areas of support required for the teachers.

First, training is the most frequently mentioned need, with various teachers specifying different aspects. They request general training, Teacher Professional Development (TPD) training, refresher training, seasonal refreshment training, subject-wise teacher training, and training on the objectives and process of the integrated curriculum. This highlights a perceived lack of preparedness and a desire for ongoing professional development to implement the integrated curriculum approach effectively.

Second, teachers express a need for a variety of materials, including educational materials development, additional workbooks, and workbooks, illustrations, audio teaching materials, chart paper, teaching-learning materials, and audio-visual materials. Some specifically mention the need for smart boards. This suggests a shortage of appropriate resources to support integrated curriculum instruction.

Third, most of the teachers in the study mentioned that they require guidance and support. They demand proper guidance, and support in how to teach lessons and solve problems in teaching. This indicates a desire for mentorship and practical assistance in implementing the integrated curriculum in the classroom. The request for frequent monitoring also suggests a need for ongoing support and feedback.

Fourth, teachers recognize the need to develop their own capacity and skills to effectively implement the integrated curriculum. This reinforces the need for training and ongoing professional development opportunities.

In short, the responses reveal that teachers feel they need more training, better access to resources, more guidance and support, and opportunities for skill development to successfully implement the integrated curriculum in English. These requests highlight potential gaps in the current support system and provide valuable insights for planning future professional development and resource allocation.

(9) Development of Language Skills and Aspects

The question "Is the integrated curriculum supportive for the development of language skills and aspects in English? If yes, please write in short how it helps." was asked to the participant teachers from seven districts. Responses from 32 English teachers in the survey revealed a generally positive view of the

integrated curriculum's impact on English language skills, with 26 teachers agreeing that it is supportive. However, a minority of teachers (3 males and 3 females) expressed concerns, citing three key reasons why the new curriculum fell short in language development. First, these teachers pointed to a lack of adequate training on the new curriculum, leaving them feeling unprepared to implement it effectively. Second, they reported insufficient support for both teachers and students, suggesting a need for more resources and assistance in navigating the curriculum's demands. Finally, and equally important, these 6 teachers (3 from Kapilvastu and 3 from Dailekh) felt the curriculum and workbook content were too advanced for the student's age group, creating a mismatch between the material and the student's learning capacity. This suggests a need for curriculum revision or additional support strategies to bridge the gap between the curriculum's expectations and the student's current skill level.

(10) Suggestions

Participants were asked, "What specific suggestions do you have regarding integrated curriculum, English workbooks, teacher's guide, other reference materials, and teacher training?" The analysis of teachers' responses reveals consistent themes across all seven districts (Kanchanpur, Dailekh, Kapilvastu, Syangja, Dhading, Saptari, and Sankhuwasabha), highlighting systemic challenges in basic education regarding the implementation of the integrated curriculum. They are described below.

First, the most prominent concern is the urgent need for comprehensive teacher training**,** particularly on integrated curriculum (IC), subject-specific teaching methods, and student assessment. Teachers consistently express feeling unprepared and unsupported in implementing new pedagogical approaches. Teachers from all districts also mention the need for refresher training and more practical, classroom-based professional development for them.

Second, **t**eachers report shortages of essential materials, including teacher's guides, workbooks, and other reference materials. Late delivery of these resources further complicates lesson planning and instruction. The lack of a teacher's guide is a particularly critical concern, as these guides provide crucial support for curriculum implementation.

Third, teachers in some districts find the content too advanced for students' age and developmental level, hindering comprehension and engagement. There are also calls for workbooks with improved design, including more visually appealing layouts, simpler language, and content relevant to students' daily lives and local contexts. The need for more age-appropriate and engaging learning materials is evident.

Fourth, technology integration is another area that needs attention. Although some schools have ICT resources, teachers report a lack of effective utilization. Therefore, training and support in integrating technology into teaching practices is necessary.

Finally, support and guidance for teachers are consistently highlighted by participant teachers to implement the integrated curriculum. Along with training, teachers expected clearer guidelines for curriculum implementation, timely access to resources, and regular class observations to provide feedback and support for improvement. The responses suggest a need for a more supportive and resource-rich environment to enable teachers to do their jobs effectively. Addressing these systemic challenges is crucial for improving the quality of integrated curriculum implementation across all the districts.

1-4-3 Hamro Serofero

(1) Key findings from the questionnaire

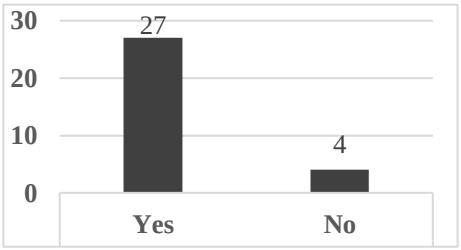
The IBSE sample baseline survey was conducted across seven districts, each representing one of the seven provinces. The survey aimed to ensure provincial representation by selecting at least two local governments from one district. A questionnaire consisting of fourteen questions was designed, focusing on the Hamro Serofero subject for the survey. The key findings, collected by subject teachers, are summarized below, with the full questionnaire attached in the appendix.

Q1 Has the school managed the time to teach Hamro Serofero subject according to the credit hour (8 hours per week) or not?

The graphs show that 87.1% of respondents believe that the school has managed the time to teach the "Hamro Serofero" subject according to the required 8 hours per week. In contrast, 12.9% of respondents think the school has not managed the time effectively due to traditional practices.

Table 2-98 and Figure 1-93 Has the school managed the time to teach the Hamro Serofero subject according to the credit hour (8 hours per week) or not?

Response	Yes	No
	27	4
Response in Percentage	87.1	12.9

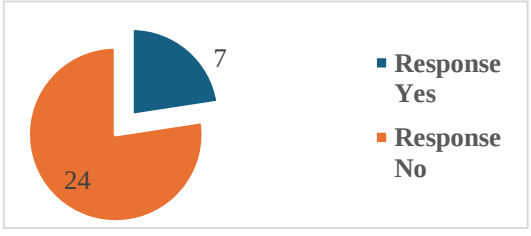


Q2 Have you got any training related to integrated curriculum?

The pie chart shows that 22.6% of individuals have received training related to an integrated curriculum, while the remaining 77.4% have not received such training. So, training programs related to an integrated curriculum are required immediately.

Table 1-99 and Figure 1-94 Have you got any training related to integrated curriculum?

Response	Yes	No
	7	24
Response in Percentage	22.6	77.4

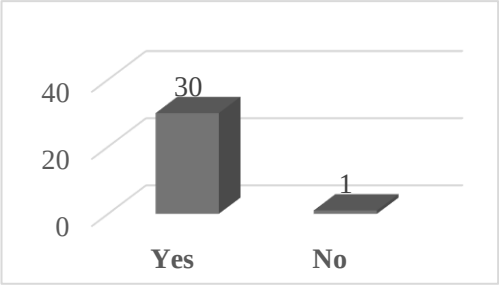


Q3 Is it necessary to do teaching-learning activities with peers or groups?

The data indicates that 96.8% of respondents believe it is necessary to conduct teaching and learning activities through peers or groups, while only 3.2% think it is not necessary.

Table 1-100 and Figure 1-95 Is it necessary to do teaching-learning activities by peers or group?

Response	Yes	No
	30	1
Response in Percentage	96.8	3.2

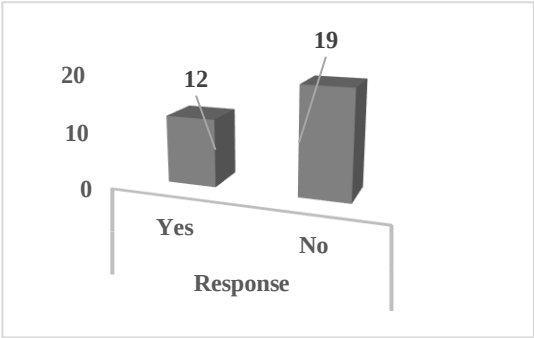


Q4 Have you kept a record of the personal and family situation of all the students?

The table shows that 38.7% of respondents have kept a record of the personal and family situation of all the students, while 61.3% have not maintained such records. It reflects that teaching learning activities don't meet the expectation of an integrated curriculum.

Table 1-101 and Figure 1-96 Have you kept a record of the personal and family situation of all the students?

Response	Yes	No
	12	19
Response in Percentage	38.7	61.3

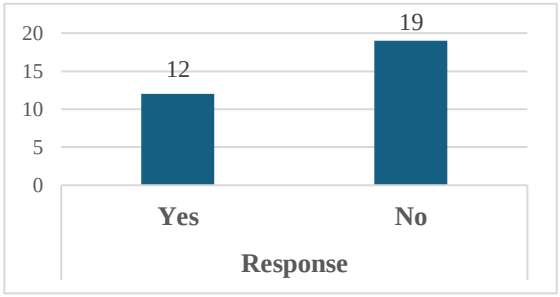


Q5 Is there any topic (area) that you find most difficult while teaching Hamro Serofero subject?

The table and figure reveal that 38.7% of respondents find that certain topics related to science are difficult while teaching the "Hamro Serofero" subject, whereas 61.3% do not find any specific topics difficult.

Table 1-102 and Figure 1-97 Is there any topic (area) that you find most difficult while teaching Hamro Serofero subject?

Response	Yes	No
	12	19
Response in Percentage	38.7	61.3

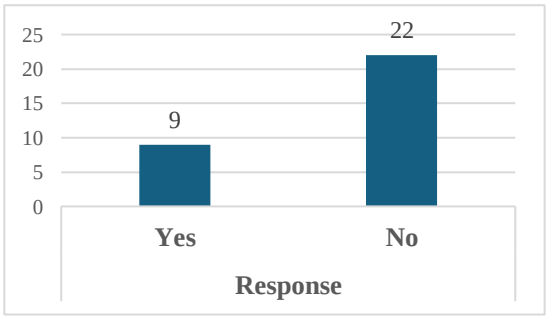


Q6 Have you created any rubrics to record the key learning outcomes that students should achieve by theme?

The data indicate that 29.03% of respondents have created rubrics to record the key learning outcomes that students should achieve by theme, while 70.97% have not created such rubrics. So, advanced training programs are immediately required to keep assessment records.

Table 21-103 and Figure 1-98 Have you created any rubrics to record the key learning outcomes that students should achieve by theme?

Response	Yes	No
	9	22
Response in Percentage	29.03	70.97

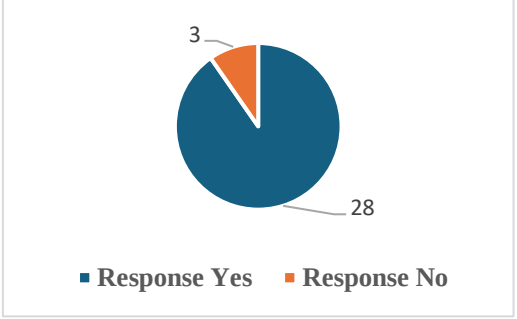


Q7 Can Hamro Serofero subject workbooks, teacher's guides and assessment methods help to achieve grade level competency and classroom learning achievement?

The table shows that 90.32% of respondents believe that the "Hamro Serofero" subject workbooks, teacher's guides, and assessment methods can help achieve grade-level competency and classroom learning achievement. Meanwhile, 9.68% disagree with this view. It clarifies that there is a correlation among the workbooks, teachers guide and assessment method

Table 1-104 and Figure 1-99 Can Hamro Serofero subject workbooks, teacher's guides and assessment methods help to achieve grade level competency and classroom learning achievement?

Response	Yes	No
	28	3
Response in Percentage	90.32	9.68



Q8 What activities have you done to make students responsible towards the community while facilitating Hamro Serofero topic?

Some of the major activities that our respondents have adopted to make students responsible towards the community while facilitating the Hamro Serofero subject topic are as follows.

a) Allowing students to participate in community level hygiene and sanitation.

b) Allowing students to participate in different ceremonies conducted by the community.

c) Teaching the student to support family work, helping needy people, and contributing to society.

d) Engaging students in various festivals and fairs, showing videos and performing street dramas, and involving them in personal and community cleaning initiatives.

e) Involving students in project work, parent meetings, observing festivals and fairs, cleaning temples and monasteries, road and street cleaning, and using clean and safe water, etc.

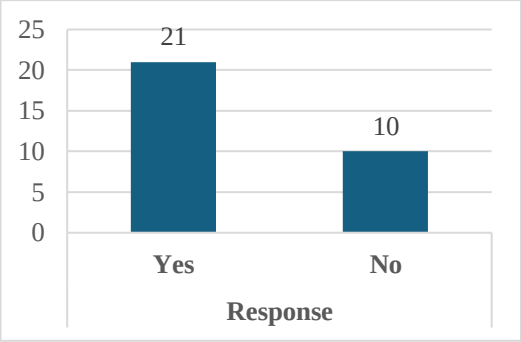
f) Teaching the local traditions, cultural practices, marriage system, festival, and project work.

Q9 Have you conducted teaching and learning activities according to the spirit and norms of the integrated curriculum? What do you think?

The data show that 67.74% of respondents have conducted teaching and learning activities according to the spirit and norms of the integrated curriculum, while 32.26% have not.

Table 1-105 and Figure 1-100 Have you conducted teaching and learning activities according to the spirit and norms of the integrated curriculum? What do you think?

Response	Yes	No
	21	10
Response in Percentage	67.74	32.26

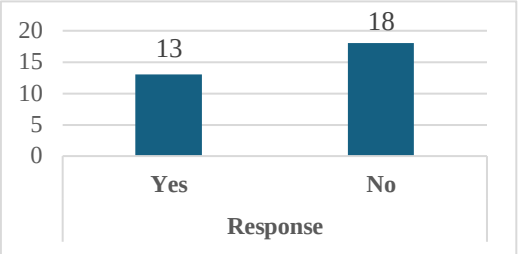


Q10 Have you faced any problems while teaching, based on integrated curriculum?

The data indicates that 41.94% of respondents have faced problems while teaching based on the integrated curriculum, while 58.06% have not encountered any issues. Generally confused about how to integrate with other subjects and keep theme-wise records.

Table 1-106 and Figure 1-101 Have you faced any problems while teaching, based on integrated curriculum?

Response	Yes	No
	13	18
Response in Percentage	41.94	58.06

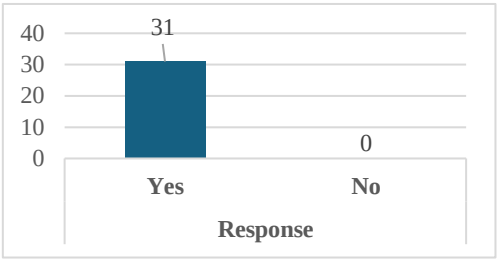


Q11 What effects has the implementation of the integrated curriculum had on the learners?

The table shows that 100% of respondents believe the implementation of the integrated curriculum has had a positive effect on the learners, with no respondents reporting any negative effects. All respondents agree the integrated curriculum is the best.

In response to Question Number 12, what local materials have you used while teaching? All respondents mentioned the following local materials are used while teaching.

Table 1-107 and Figure 1-102 What effects has the implementation of the integrated curriculum had on the learners?



Q12 What effect has the implementation of the integrated curriculum had on the learners?

The list of local materials used by teachers to integrate the curriculum while teaching.

Charts	Pictures	Available local resources
Word, sentence, family	Religious places, flowers, maps, plants	Marble, stone, wood, tree, plants, grains, fruits, measurement tools, mud, cultural dress, farming equipment.

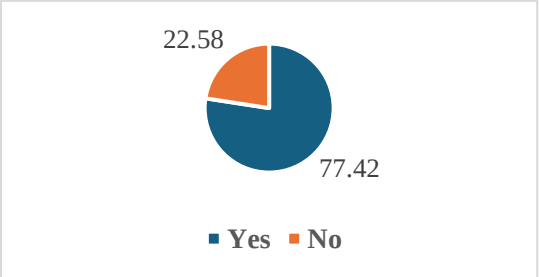
Q13 Is there a lack of educational materials while doing teaching learning activities in integrated curriculum?

Response	Yes	No
	31	0
Response in Percentage	100	0

The table shows that above 77.42% of the respondents believe that there is a lack of educational materials while doing teaching learning activities in the integrated curriculum, while 22.58% face no problems with materials. In fact that 24 respondents said "yes" which indicates that a significant number of people perceive a lack of educational materials as a challenge in the integrated curriculum teaching.

Table 1-108 and Figure 1-103 Is there a lack of educational materials while doing teaching learning activities in integrated curriculum?

Response	Yes	No
	24	7
Response in Percentage	77.42	22.58



Q14 Regarding integrated Curriculum, do you have any suggestions related to Hamro Serofero workbooks, teacher's guides, workbook, evaluation system etc.?

Among the 31 responses, some of the suggestions regarding the integrated curriculum are as follows:

a) Teacher training is required in the integrated curriculum.
b) It is difficult to find out the integrated learning outcomes while teaching multidisciplinary subjects.
c) Ensure the availability of educational materials, digital tools and multimedia at school.
d) There must be clear ideas on the curriculum and the teacher's guide.
e) Make the evaluation system easier and reliable.
f) Clear ideas should be given through the teacher's guide, the curriculum, and the workbook.
g) High volume of workbook contents should be reduced

1-5 Head Teacher Questionnaire

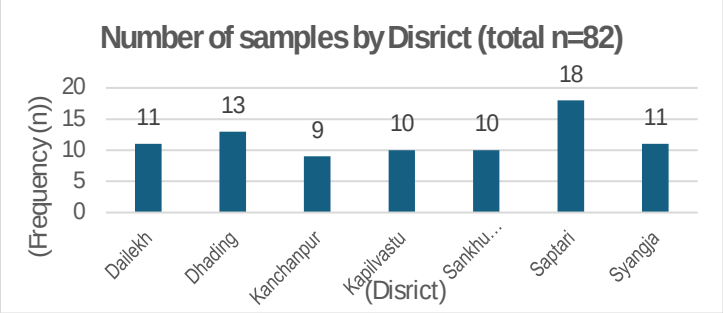
1-5-1 Sample of Head Teachers by 7 Districts (District and Gender-wise)

The samples of head teachers for this baseline report are as follows. The total number is 82. Saptari has the largest number (n=18), and the smallest is Kanchanpur (n=9). However, the sample size is relatively well-balanced over seven districts.

Table 1-109 Sample by District

District	n	%
Dailekh	11	13%
Dhading	13	16%
Kanchanpur	9	11%
Kapilvastu	10	12%
Sankhuwasabha	10	12%
Saptari	18	22%
Syangja	11	13%
Total	82	100%

Figure 1-104 Sample by District



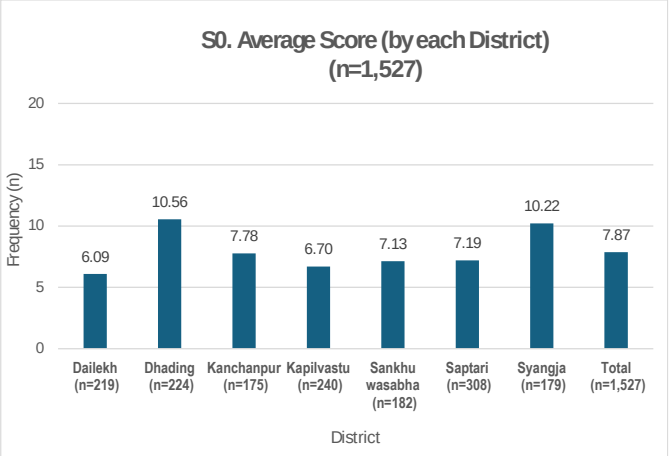
1-5-2 Average Test Score (Maths)

Although this information has already been reported in the student baseline report, it is again included in this head teacher baseline report for reference. The average test scores of students by district are as follows. The overall average is 7.87 (The full mark point is 20 points). The highest scores are Dhading (10.56) and Syangja (10.22). The lowest score is Dailekh (6.09). The standard deviation (overall) is 4.53.

Table 1-110 Test Score by District

District Name	Obs	Mean	Std.	Min	Max
Dailekh	219	6.09	3.37	0	18
Dhading	224	10.56	4.26	1	21
Kanchanpur	175	7.78	4.02	0	20
Kapilvastu	240	6.70	4.74	0	19
Sankhuwasabha	182	7.13	3.98	0	18
Saptari	308	7.19	4.31	0	19
Syangja	179	10.22	4.87	2	20
Total	1527	7.87	4.53	0	21

Figure 1-105 Average Test Score by District



1-5-3 Analysis of the Relationship between Test Results and Head teacher' Responses

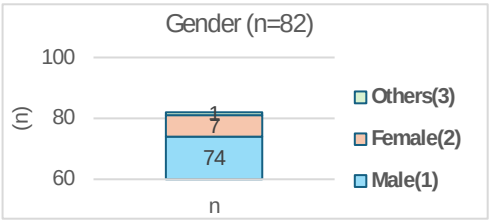
(a) Basic Information

(1) Gender (Head Teacher) (HT1)

The gender reported by the head teachers is as follows. The overall ratio of females, males and others is 9%, 90% and 1%. Although this ratio is more or less the same over seven districts, only the overall ratio is reported in this report for securing privacy.

Table 1-111 and Figure 1-106 Gender (Head Teacher)

	Male(1)	Female(2)	Others(3)	Total
n	74	7	1	82
%	90%	9%	1%	100%

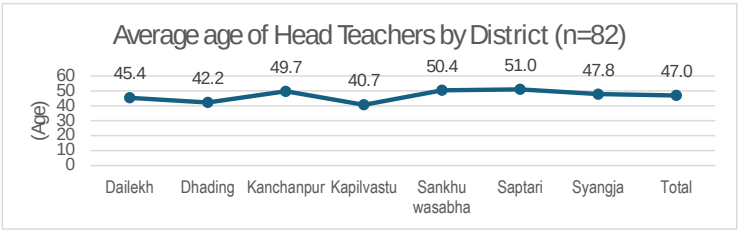


(2) Age (Head Teacher) (HT2)

The age reported by the head teachers is as follows. The average age of the overall sample teachers is 47.3. Saptari has the highest average (51.0), and Dhading has the youngest (42.2).

Table 1-112 Age (Head Teacher) **Figure 1-107 Age (Head Teacher)**

District	Average	5.5	n
Dailekh	45.4	5.5	11
Dhading	42.2	6.7	13
Kanchanpur	49.7	5.0	9
Kapilvastu	40.7	5.5	10
Sankhuwasabha	50.4	7.0	10
Saptari	51.0	7.1	18
Syangja	47.8	7.3	11
Total	47.0	7.3	82



(3) Caste and Ethnicity (Head Teacher) (HT3)

The caste and ethnicity reported by the head teachers are as follows. The highest ratio (overall) is B/C (54%), with the second as Janajatis (32%). Dalit is only 4%. Saptari has the highest share of others (44%). The composition in each district is various. This composition is truly different from that of students in each district.

Table 1-113 Caste and Ethnicity

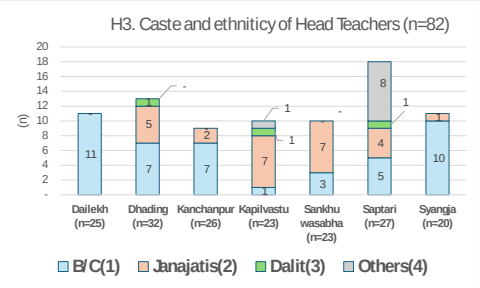
(n)

District	B/C(1)	Janajatis(2)	Dalit(3)	Others(4)	Total
Dailekh	11	0	0	0	11
Dhading	7	5	1	0	13
Kanchanpur	7	2	0	0	9
Kapilvastu	1	7	1	1	10
Sankhuwasabh	3	7	0	0	10
Saptari	5	4	1	8	18
Syangja	10	1	0	0	11
Total	44	26	3	9	82

(%)

District	B/C(1)	Janajatis(2)	Dalit(3)	Others(4)	Total
Dailekh	100%	0%	0%	0%	100%
Dhading	54%	38%	8%	0%	100%
Kanchanpur	78%	22%	0%	0%	100%
Kapilvastu	10%	70%	10%	10%	100%
Sankhuwasabh	30%	70%	0%	0%	100%
Saptari	28%	22%	6%	44%	100%
Syangja	91%	9%	0%	0%	100%
Total	54%	32%	4%	11%	100%

Figure 1-108 Caste and Ethnicity



(4) Years of Experience as a Head Teacher (HT4)

Their years of experience as head teachers are as follows. The most frequent response overall is "1-5 years" (43%). In Kapilvastu, the ratio of this category is the highest (90%). The lowest of this category is Dailekh (18%).

Table 1-114 Years of HT experience

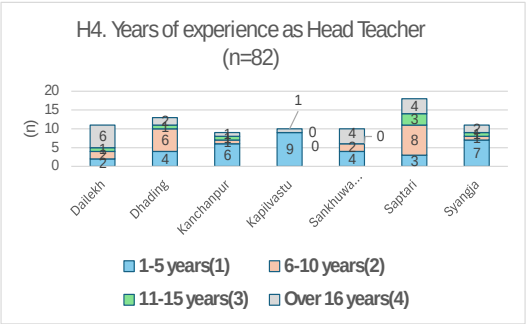
(n)

District	1-5 years(1)	6-10 years(2)	11-15 years(3)	Over 16 years(4)	Total
Dailekh	2	2	1	6	11
Dhading	4	6	1	2	13
Kanchanpur	6	1	1	1	9
Kapilvastu	9	0	0	1	10
Sankhuwa	4	2	0	4	10
Saptari	3	8	3	4	18
Syangja	7	1	1	2	11
Total	35	20	7	20	82

(%)

District	1-5 years(1)	6-10 years(2)	11-15 years(3)	Over 16 years(4)	Total
Dailekh	18%	18%	9%	55%	100%
Dhading	31%	46%	8%	15%	100%
Kanchanpur	67%	11%	11%	11%	100%
Kapilvastu	90%	0%	0%	10%	100%
Sankhuwasabh	40%	20%	0%	40%	100%
Saptari	17%	44%	17%	22%	100%
Syangja	64%	9%	9%	18%	100%
Total	43%	24%	9%	24%	100%

Figure 1-109 Years of HT experience



(5) Qualification (HT5)

Qualifications of the head teachers are as follows. “Master or above” is the highest (52%), and the second is “Bachelor” (27%). The highest “Master or above” ratio is Sankhuwasabha (70%), and the lowest is Kapilvastu (20%).

Table 1-115 Qualification

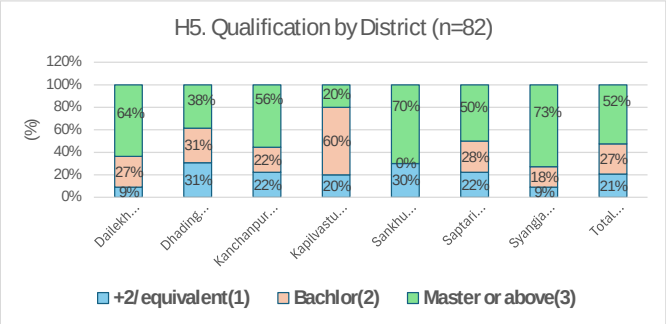
(n)

District	+2/equivalent(1)	Bachlor(2)	Master or above(3)	Total
Dailekh	1	3	7	11
Dhading	4	4	5	13
Kanchanpur	2	2	5	9
Kapilvastu	2	6	2	10
Sankhuwasabh	3	0	7	10
Saptari	4	5	9	18
Syangja	1	2	8	11
Total	17	22	43	82

(%)

District	+2/equivalent(1)	Bachlor(2)	Master or above(3)	Total
Dailekh	9%	27%	64%	100%
Dhading	31%	31%	38%	100%
Kanchanpur	22%	22%	56%	100%
Kapilvastu	20%	60%	20%	100%
Sankhuwasabh	30%	0%	70%	100%
Saptari	22%	28%	50%	100%
Syangja	9%	18%	73%	100%
Total	21%	27%	52%	100%

Figure 1-110 Qualification



(6) Number of Classes (HT6)

Number of classes reported by the head teachers is as follows. Just a few schools have special needs classes.

Table 1-116 Number of Classes

Grade→	G1						G2						G3						Total (G1~G3)					
Normal or Special→	Nomal class			Special need class			Nomal class			Special need class			Nomal class			Special need class			Nomal class			Special need class		
#of classes→ / ↓District	0	1	More than 1	0	1	More than 1	0	1	More than 1	0	1	More than 1	0	1	More than 1	0	1	More than 1	0	1	More than 1	0	1	More than 1
Dailekh	4	6	1	8	1	1	4	6	1	9	2	1	5	5	1	10	1	0	13	17	3	27	4	2
Dhading	0	13	0	13	0	0	0	13	0	13	0	0	0	13	0	13	0	0	0	39	0	39	0	0
Kanchanpur	0	9	0	7	0	0	0	9	0	9	0	0	0	8	0	9	0	0	0	26	0	25	0	0
Kapilvastu	0	10	0	10	0	0	0	10	0	10	0	0	0	10	0	10	0	0	0	30	0	30	0	0
Sankhuwasabha	0	10	0	10	0	0	0	10	0	10	0	0	0	10	0	10	0	0	0	30	0	30	0	0
Saptari	1	17	0	18	0	0	1	17	0	18	0	0	1	17	0	17	1	0	3	51	0	53	1	0
Syangja	0	10	1	10	0	0	0	10	1	10	1	1	0	10	1	10	0	1	0	30	3	30	1	2
Total	5	75	2	76	1	1	5	75	2	79	3	2	6	73	2	79	2	1	16	223	6	234	6	4

(7) Multi-Grade Classes (HT9)

Some schools (15%) have multi-grade classes. Kapilvastu has the highest ratio (30%), and the second is Saptari (28%). Sankhuwasabha and Syangja do not have any multi-grade classes.

Table 1-117 Multi-Grade Classes

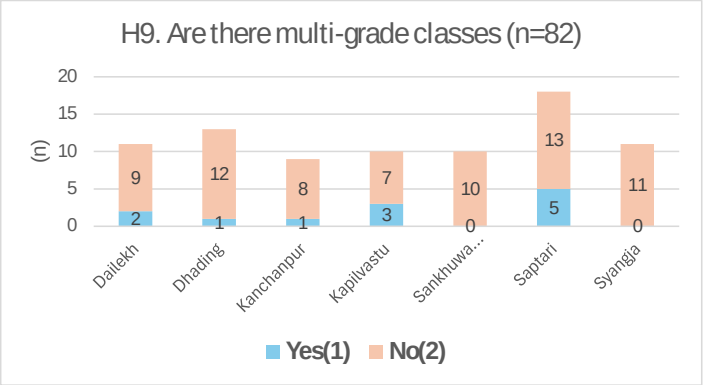
(n)

District	Yes(1)	No(2)	Total
Dailekh	2	9	11
Dhading	1	12	13
Kanchanpur	1	8	9
Kapilvastu	3	7	10
Sankhuwa	0	10	10
Saptari	5	13	18
Syangja	0	11	11
Total	12	70	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	18%	82%	100%
Dhading	8%	92%	100%
Kanchanpur	11%	89%	100%
Kapilvastu	30%	70%	100%
Sankhuwasabh	0%	100%	100%
Saptari	28%	72%	100%
Syangja	0%	100%	100%
Total	15%	85%	100%

Figure 1-111 Multi-Grade Classes



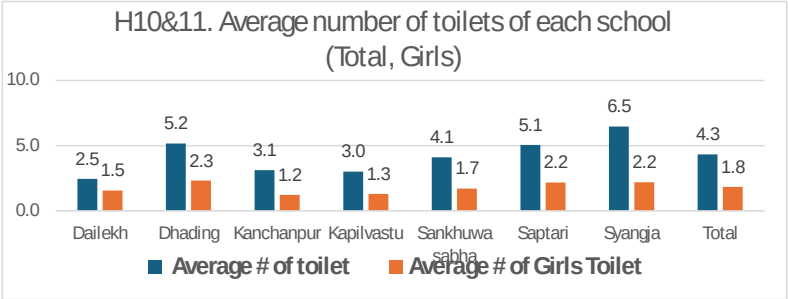
(b) School Physical Facility

(8) Average Number of Toilets and Girls' Toilets in the School (HT10&11)

The average number of toilets and girls' toilets in the school is as follows. It seems girls' toilets are less than half of the total toilets at schools in all districts.

Table 1-118 and Figure 1-112 Average Number of Toilets and girls' Toilets in the school

District	Average # of toilet	Average # of Girls Toilet	n of schools
Dailekh	2.5	1.5	11
Dhading	5.2	2.3	13
Kanchanpur	3.1	1.2	9
Kapilvastu	3.0	1.3	10
Sankhuwa sabha	4.1	1.7	10
Saptari	5.1	2.2	18
Syangja	6.5	2.2	11
Total	4.3	1.8	82



(9) Does the school have an electricity facility? (HT12)

The responses to "Does the school have an electric facility?" are as follows. Almost all schools have electric facilities (96%). Only two schools in Dailekh and one school in Saptari do not have it.

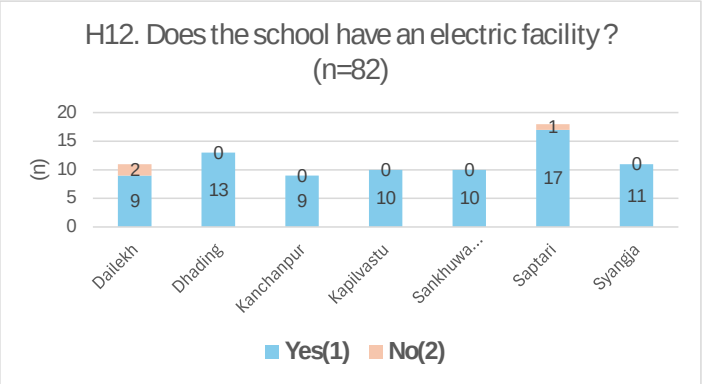
Table 1-119 and Figure 1-113 Does the school have an electricity facility?

(n)

District	Yes(1)	No(2)	Total
Dailekh	9	2	11
Dhading	13	0	13
Kanchanpur	9	0	9
Kapilvastu	10	0	10
Sankhuwa	10	0	10
Saptari	17	1	18
Syangja	11	0	11
Total	79	3	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	82%	18%	100%
Dhading	100%	0%	100%
Kanchanpur	100%	0%	100%
Kapilvastu	100%	0%	100%
Sankhuwasabh	100%	0%	100%
Saptari	94%	6%	100%
Syangja	100%	0%	100%
Total	96%	4%	100%



(10) Does the school have at least one personal computer? (HT13)

The responses to this question are as follows. Most schools have at least one PC (88%). A total of 10 schools do not have PCs.

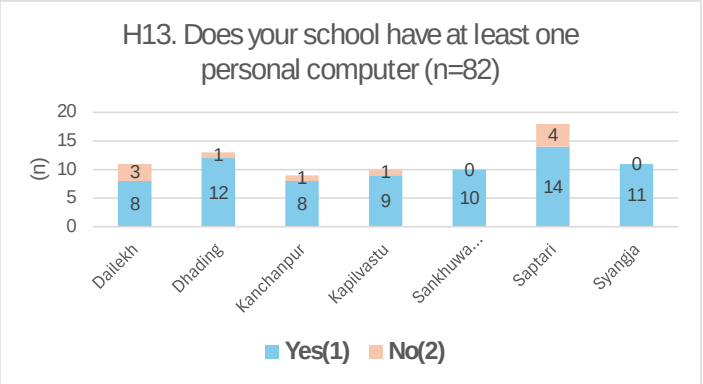
Table 1-120 and Figure 1-114 Does the school have at least one personal computer?

(n)

District	Yes(1)	No(2)	Total
Dailekh	8	3	11
Dhading	12	1	13
Kanchanpur	8	1	9
Kapilvastu	9	1	10
Sankhuwa	10	0	10
Saptari	14	4	18
Syangja	11	0	11
Total	72	10	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	73%	27%	100%
Dhading	92%	8%	100%
Kanchanpur	89%	11%	100%
Kapilvastu	90%	10%	100%
Sankhuwasabh	100%	0%	100%
Saptari	78%	22%	100%
Syangja	100%	0%	100%
Total	88%	12%	100%



(11) Is it (PC) connected to the Internet? (HT14)

The responses to this question are as follows. Most schools have at least one PC connected to the internet (84%). A total of 12 schools do not have Internet access.

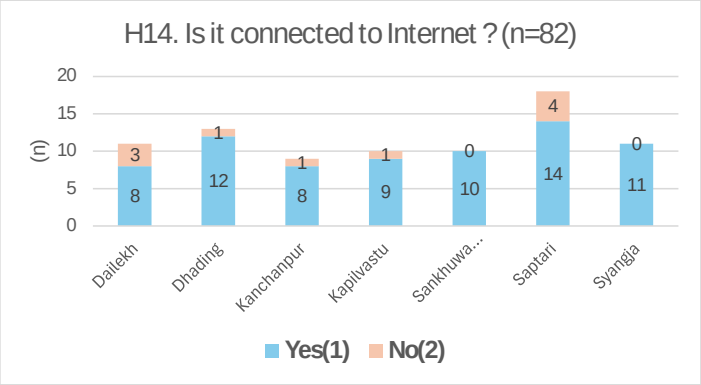
Table 1-121 and Figure 1-115 Is it (PC) connected to the Internet?

(n)

District	Yes(1)	No(2)	Total
Dailekh	7	4	11
Dhading	12	1	13
Kanchanpur	8	1	9
Kapilvastu	9	1	10
Sankhuwa	8	2	10
Saptari	14	3	17
Syangja	11	0	11
Total	69	12	81

(%)

District	Yes(1)	No(2)	Total
Dailekh	64%	36%	100%
Dhading	92%	8%	100%
Kanchanpur	89%	11%	100%
Kapilvastu	90%	10%	100%
Sankhuwasabh	80%	20%	100%
Saptari	78%	17%	94%
Syangja	100%	0%	100%
Total	84%	15%	99%



(12) Are teachers allowed to access the internet through school Wi-Fi for official work (such as online teacher training, collecting teaching materials, online study for preparing lessons etc.)? (HT15)

The responses to this question are as follows. 67% of schools allow teachers to access the internet through school Wi-Fi for their official work. 33% of teachers do not have internet access for official work.

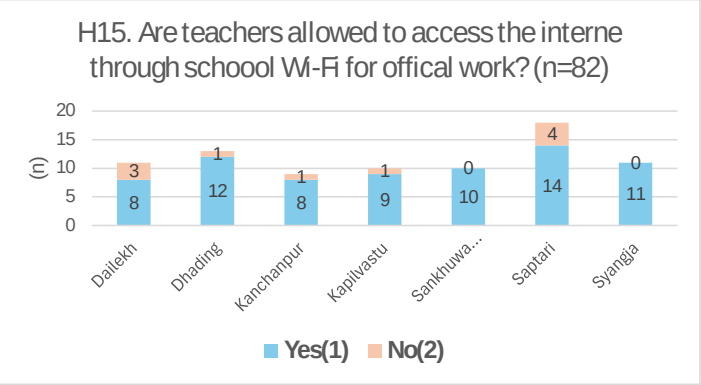
Table 1-122 and Figure 1-116 Are teachers allowed to access the internet through school Wi-Fi for official work?

(n)

District	Yes(1)	No(2)	Total
Dailekh	5	6	11
Dhading	9	4	13
Kanchanpur	7	2	9
Kapilvastu	6	4	10
Sankhuwa	5	5	10
Saptari	12	6	18
Syangja	11	0	11
Total	55	27	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	45%	55%	100%
Dhading	69%	31%	100%
Kanchanpur	78%	22%	100%
Kapilvastu	60%	40%	100%
Sankhuwasabh	50%	50%	100%
Saptari	67%	33%	100%
Syangja	100%	0%	100%
Total	67%	33%	100%



(13) Is the school's internet good for watching videos? (HT16)

The responses to this question are as follows. 60% of schools responded “Yes,” but 40% responded “No”. Syangja has the highest (73%), and Sankhuwasabha has the lowest (just 40%).

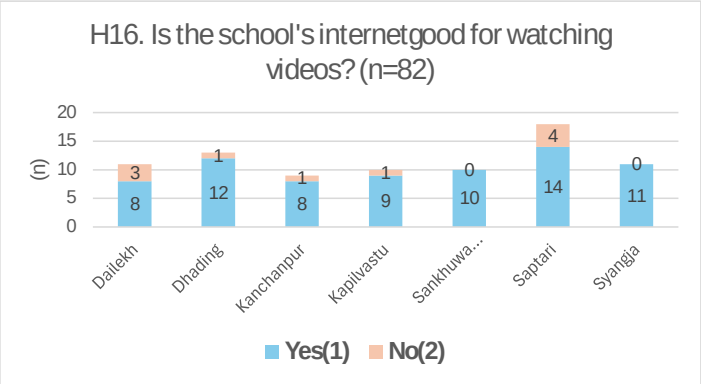
Table 1-123 and Figure 1-117 Is the school's internet good for watching videos?

(n)

District	Yes(1)	No(2)	Total
Dailekh	5	6	11
Dhading	7	6	13
Kanchanpur	5	4	9
Kapilvastu	7	3	10
Sankhuwa	4	6	10
Saptari	13	5	18
Syangja	8	3	11
Total	49	33	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	45%	55%	100%
Dhading	54%	46%	100%
Kanchanpur	56%	44%	100%
Kapilvastu	70%	30%	100%
Sankhuwasabh	40%	60%	100%
Saptari	72%	28%	100%
Syangja	73%	27%	100%
Total	60%	40%	100%



(14) Is the school equipped with a projector and internet access for online training? (HT17)

The responses to this question are as follows. 66% of schools responded "Yes," but 34% responded "No". Syangja has the highest (91%), and Sankhuwasabha has the lowest (just 40%).

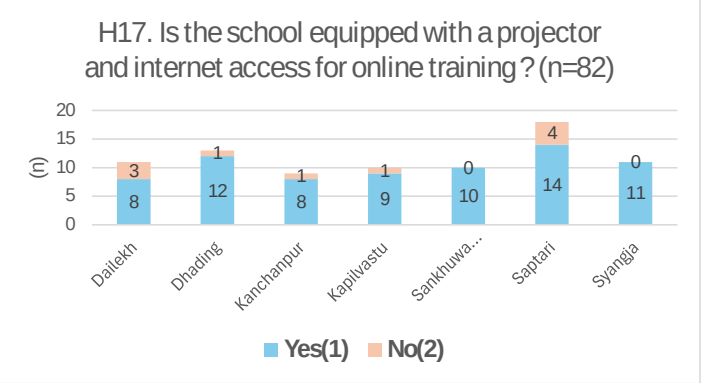
Table 1-124 and Figure 1-118 Is the school equipped with a projector and internet access for online training?

(n)

District	Yes(1)	No(2)	Total
Dailekh	6	5	11
Dhading	9	4	13
Kanchanpur	7	2	9
Kapilvastu	7	3	10
Sankhuwa	4	6	10
Saptari	11	7	18
Syangja	10	1	11
Total	54	28	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	55%	45%	100%
Dhading	69%	31%	100%
Kanchanpur	78%	22%	100%
Kapilvastu	70%	30%	100%
Sankhuwasabh	40%	60%	100%
Saptari	61%	39%	100%
Syangja	91%	9%	100%
Total	66%	34%	100%



(c) Teacher Professional Development and Support

(15) Do you receive any training/orientation on the G1-3 integrated curriculum? (HT18)

The responses to this question are as follows. Nearly half (53% of all head teachers) responded that they received G1-3 integrated training. However, in Dailekh, only 27% of the head teachers received this training.

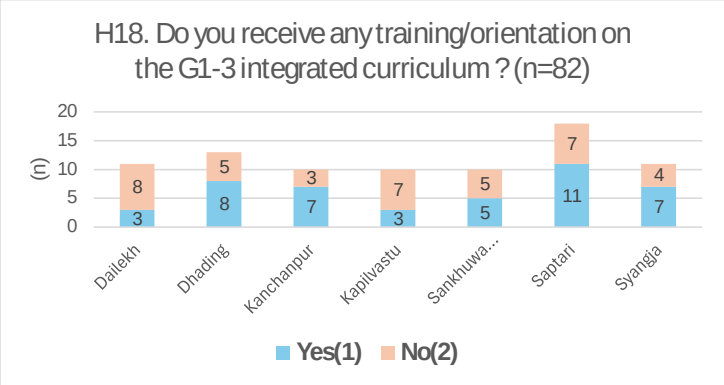
Table 1-125 & Figure 1-119 Do you receive any training/orientation on the G1-3 integrated curriculum?

(n)

District	Yes(1)	No(2)	Total
Dailekh	3	8	11
Dhading	8	5	13
Kanchanpur	7	3	10
Kapilvastu	3	7	10
Sankhuwa	5	5	10
Saptari	11	7	18
Syangja	7	4	11
Total	44	39	83

(%)

District	Yes(1)	No(2)	Total
Dailekh	27%	73%	100%
Dhading	62%	38%	100%
Kanchanpur	70%	30%	100%
Kapilvastu	30%	70%	100%
Sankhuwasabh	50%	50%	100%
Saptari	61%	39%	100%
Syangja	64%	36%	100%
Total	53%	47%	100%



(16) Frequency of Observing G1-3 Classes (HT19)

The responses to this question are as follows. The most frequent response is "1-3 times a month" (38%), and the second most frequent is "1-3 times a week" (33%).

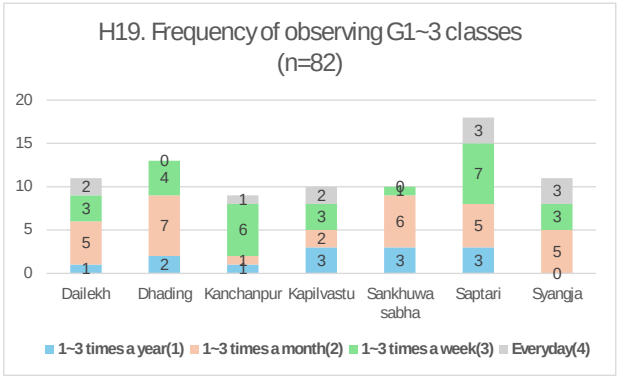
Table 1-126 & Figure 1-120 Frequency of Observing G1-3 classes

(n)

District	1~3 times a year(1)	1~3 times a month(2)	1~3 times a week(3)	Everyday(4)	Total
Dailekh	1	5	3	2	11
Dhading	2	7	4	0	13
Kanchanpur	1	1	6	1	9
Kapilvastu	3	2	3	2	10
Sankhuwa	3	6	1	0	10
Saptari	3	5	7	3	18
Syangja	0	5	3	3	11
Total	13	31	27	11	82

(%)

District	1~3 times a year(1)	1~3 times a month(2)	1~3 times a week(3)	Everyday(4)	Total
Dailekh	9%	45%	27%	18%	100%
Dhading	15%	54%	31%	0%	100%
Kanchanpur	11%	11%	67%	11%	100%
Kapilvastu	30%	20%	30%	20%	100%
Sankhuwasabh	30%	60%	10%	0%	100%
Saptari	17%	28%	39%	17%	100%
Syangja	0%	45%	27%	27%	100%
Total	16%	38%	33%	13%	100%



(17) G1-3 teachers regularly consult you (head teacher) about their teaching (HT20)

The responses to this question are as follows. The most frequent response is "Agree" (65%), and the second most frequent is "Strongly Agree" (21%). Their total is 86%.

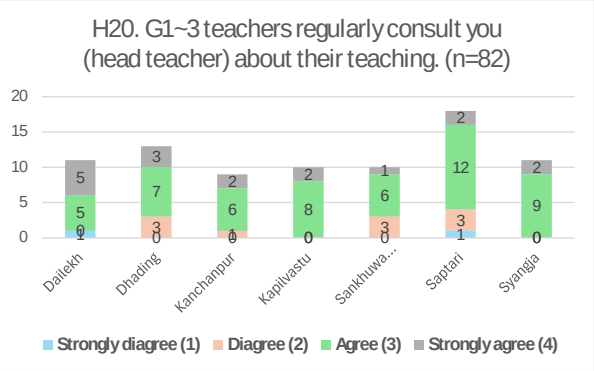
Table 1-127 & Figure 1-121 G1-3 teachers regularly consult you (head teacher) about their teaching

(n)

District	Strongly diagree (1)	Diagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	1	0	5	5	11
Dhading	0	3	7	3	13
Kanchanpur	0	1	6	2	9
Kapilvastu	0	0	8	2	10
Sankhuwa	0	3	6	1	10
Saptari	1	3	12	2	18
Syangja	0	0	9	2	11
Total	2	10	53	17	82

(%)

District	Strongly diagree (1)	Diagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	9%	0%	45%	45%	100%
Dhading	0%	23%	54%	23%	100%
Kanchanpur	0%	11%	67%	22%	100%
Kapilvastu	0%	0%	80%	20%	100%
Sankhuwasabh	0%	30%	60%	10%	100%
Saptari	6%	17%	67%	11%	100%
Syangja	0%	0%	82%	18%	100%
Total	2%	12%	65%	21%	100%



(18) G1~3 teachers talk to you about how students are doing (HT21)

The responses to this question are as follows. The most frequent response is “Agree” (61%), and the second most frequent is “Strongly Agree” (38%). Their total is 99%.

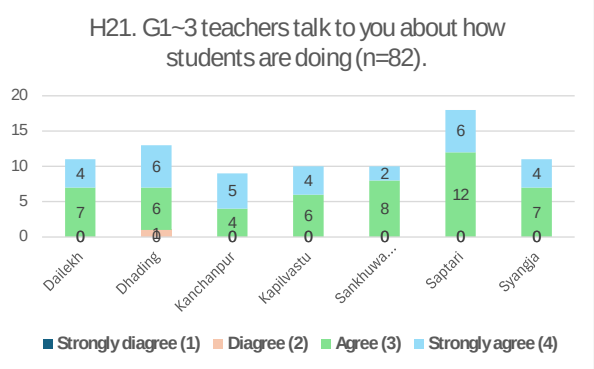
Table 1-128 & Figure 1-122 G1~3 teachers talk to you about how students are doing

(n)

District	Strongly diagree (1)	Diagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	0	0	7	4	11
Dhading	0	1	6	6	13
Kanchanpur	0	0	4	5	9
Kapilvastu	0	0	6	4	10
Sankhuwa	0	0	8	2	10
Saptari	0	0	12	6	18
Syangja	0	0	7	4	11
Total	0	1	50	31	82

(%)

District	Strongly diagree (1)	Diagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	0%	0%	64%	36%	100%
Dhading	0%	8%	46%	46%	100%
Kanchanpur	0%	0%	44%	56%	100%
Kapilvastu	0%	0%	60%	40%	100%
Sankhuwasabh	0%	0%	80%	20%	100%
Saptari	0%	0%	67%	33%	100%
Syangja	0%	0%	64%	36%	100%
Total	0%	1%	61%	38%	100%



(19) Do you make a teacher portfolio? (HT22)

The responses to this question are as follows. Less than half (43% of all head teachers) responded they make a teacher portfolio. In Sankhuwasabha, only 10% of the head teachers responded they made it.

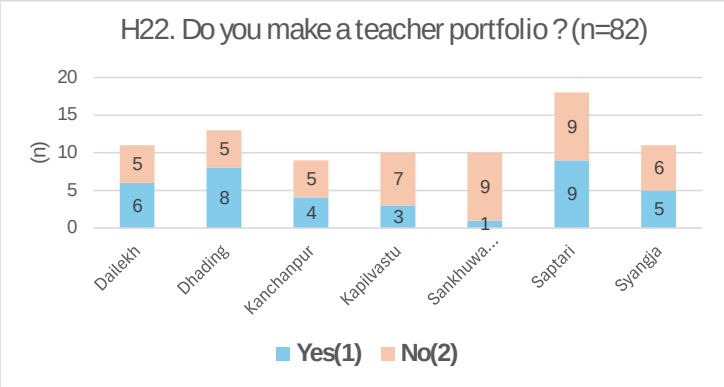
Table 1-129 & Figure 1-123 Do you make a teacher portfolio?

(n)

District	Yes(1)	No(2)	Total
Dailekh	6	5	11
Dhading	8	5	13
Kanchanpur	4	5	9
Kapilvastu	3	7	10
Sankhuwa	1	9	10
Saptari	9	9	18
Syangja	5	6	11
Total	36	46	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	55%	45%	100%
Dhading	62%	38%	100%
Kanchanpur	40%	50%	90%
Kapilvastu	30%	70%	100%
Sankhuwasabh	10%	90%	100%
Saptari	50%	50%	100%
Syangja	45%	55%	100%
Total	43%	55%	99%



(20) How many times did you organize technical meetings with the teachers in the last academic year? (HT23)

The responses to this question are as follows. The most frequent response is "1-3 times a week" (59%), and the second most frequent is "1-3 times a month" (22%). In Syangja, 91% of the head teachers responded "1-3 times a week".

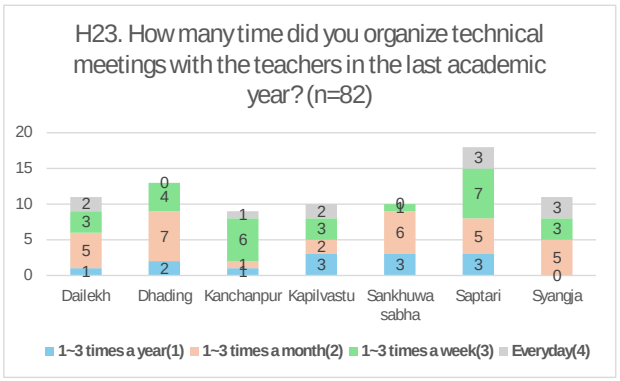
Table 1-130 & Figure 1-124 How many times did you organize technical meetings with the teachers in the last academic year?

(n)

District	Never (1)	1~2 times a year (2)	1~2 times a month (3)	1~2 times a week (4)	Total
Dailekh	6	4	1	0	11
Dhading	1	4	8	0	13
Kanchanpur	0	1	8	0	9
Kapilvastu	2	4	4	0	10
Sankhuwa	6	2	2	0	10
Saptari	0	2	15	1	18
Syangja	0	1	10	0	11
Total	15	18	48	1	82

(%)

District	1~3 times a year(1)	1~3 times a month(2)	1~3 times a week(3)	Everyday(4)	Total
Dailekh	55%	36%	9%	0%	100%
Dhading	8%	31%	62%	0%	100%
Kanchanpur	0%	11%	89%	0%	100%
Kapilvastu	20%	40%	40%	0%	100%
Sankhuwasabh	60%	20%	20%	0%	100%
Saptari	0%	11%	83%	6%	100%
Syangja	0%	9%	91%	0%	100%
Total	18%	22%	59%	1%	100%



(d) Lesson Study and LEU support

(21) Do you know 'Lesson Study'? (HT25)

The responses to this question are as follows. Most head teachers do not know about 'Lesson Study' (94% responded "No"). However, in Syangja, 36% of the head teachers responded "Yes".

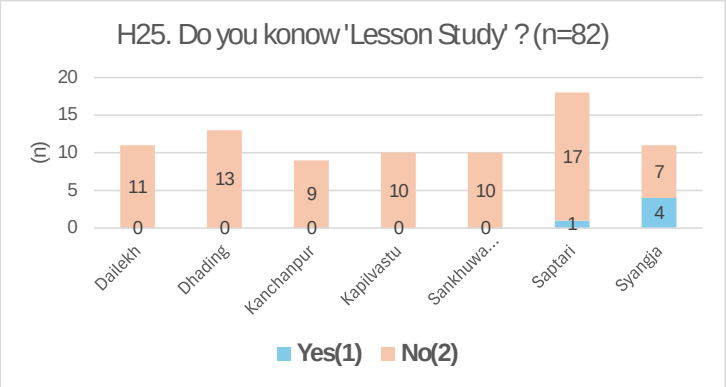
Table 1-131 & Figure 1-125 Do you know 'Lesson Study'?

(n)

District	Yes(1)	No(2)	Total
Dailekh	0	11	11
Dhading	0	13	13
Kanchanpur	0	9	9
Kapilvastu	0	10	10
Sankhuwa	0	10	10
Saptari	1	17	18
Syangja	4	7	11
Total	5	77	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	0%	100%	100%
Dhading	0%	100%	100%
Kanchanpur	0%	100%	100%
Kapilvastu	0%	100%	100%
Sankhuwasabh	0%	100%	100%
Saptari	6%	94%	100%
Syangja	36%	64%	100%
Total	6%	94%	100%



(22) How many 'Lesson Study' sessions have been conducted in the last academic year? (HT26)

The responses to this question are as follows. Most head teachers responded, “Never.” However, in Syangja, 36% of the head teachers responded “1-2 times”.

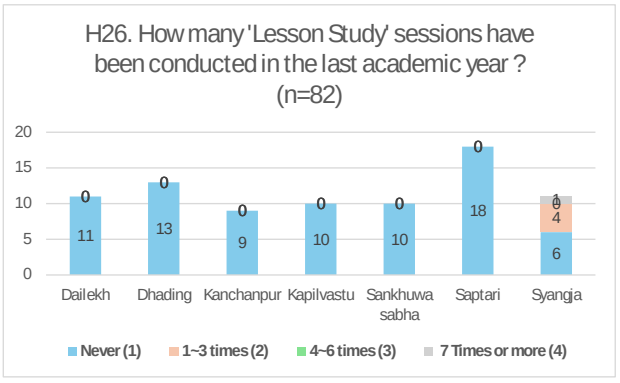
Table 1-132 & Figure 1-126 How many 'Lesson Study' sessions have been conducted in the last academic year?

(n)

District	Never (1)	1~3 times (2)	4~6 times (3)	7 Times or more (4)	Total
Dailekh	11	0	0	0	11
Dhading	13	0	0	0	13
Kanchanpur	9	0	0	0	9
Kapilvastu	10	0	0	0	10
Sankhuwa	10	0	0	0	10
Saptari	18	0	0	0	18
Syangja	6	4	0	1	11
Total	77	4	0	1	82

(%)

District	Never (1)	1~3 times (2)	4~6 times (3)	7 Times or more (4)	Total
Dailekh	100%	0%	0%	0%	100%
Dhading	100%	0%	0%	0%	100%
Kanchanpur	100%	0%	0%	0%	100%
Kapilvastu	100%	0%	0%	0%	100%
Sankhuwasabh	100%	0%	0%	0%	100%
Saptari	100%	0%	0%	0%	100%
Syangja	55%	36%	0%	9%	100%
Total	94%	5%	0%	1%	100%



(23) How frequently have you attended head teachers' meetings called by LEU in the last academic year? (HT27)

The responses to this question are as follows. The most frequent response is “once a month or more” (56%). This ratio is more than 70% in three districts: Dhading, Saptari and Syangja.

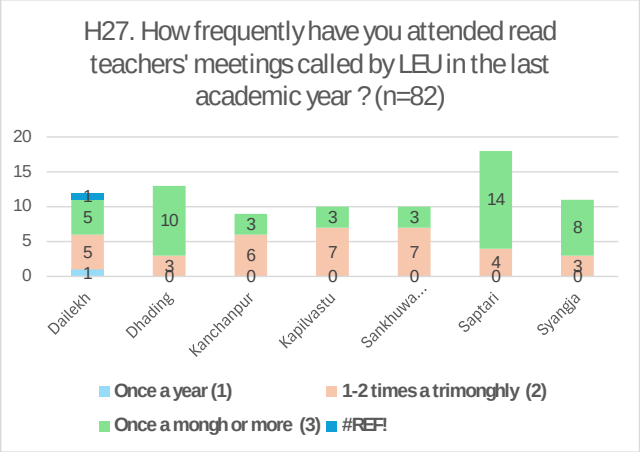
Table 1-133 & Figure 1-127 How frequently have you attended read teachers' meetings called by LEU in the last academic year?

(n)

District	Once a year (1)	1-2 times a trimonghly (2)	Once a mongh or more (3)	Total
Dailekh	1	5	5	11
Dhading	0	3	10	13
Kanchanpur	0	6	3	9
Kapilvastu	0	7	3	10
Sankhuwa	0	7	3	10
Saptari	0	4	14	18
Syangja	0	3	8	11
Total	1	35	46	82

(%)

District	Once a year (1)	1-2 times a trimonghly (2)	Once a mongh or more (3)	Total
Dailekh	9%	45%	45%	100%
Dhading	0%	23%	77%	100%
Kanchanpur	0%	67%	33%	100%
Kapilvastu	0%	70%	30%	100%
Sankhuwasabh	0%	70%	30%	100%
Saptari	0%	22%	78%	100%
Syangja	0%	27%	73%	100%
Total	1%	43%	56%	100%



(24) Does your school receive any TPD support from LEU? (HT28)

The responses to this question are as follows. Many head teachers receive TPD support (68% responded "yes"). Saptari and Kanchanpur have the highest ratio of "Yes" (83% and 78%).

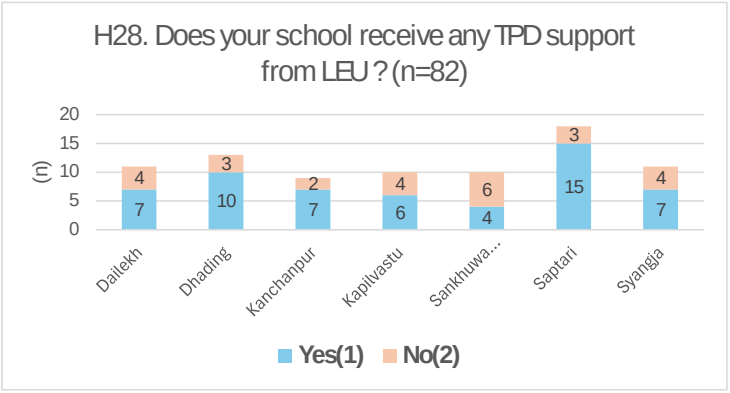
Table 1-134 & Figure 1-128 Does your school receive any TPD support from LEU?

(n)

District	Yes(1)	No(2)	Total
Dailekh	7	4	11
Dhading	10	3	13
Kanchanpur	7	2	9
Kapilvastu	6	4	10
Sankhuwa	4	6	10
Saptari	15	3	18
Syangja	7	4	11
Total	56	26	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	64%	36%	100%
Dhading	77%	23%	100%
Kanchanpur	78%	22%	100%
Kapilvastu	60%	40%	100%
Sankhuwasabh	40%	60%	100%
Saptari	83%	17%	100%
Syangja	64%	36%	100%
Total	68%	32%	100%



(e) School Management (SIP and SMC)

(25) Do you have a 5-year SIP (School Improvement Plan)? (HT30)

The responses to this question are as follows. Most head teachers have a 5-year SIP (School Improvement Plan) (88% responded "yes"). This ratio is 100% in Syangja.

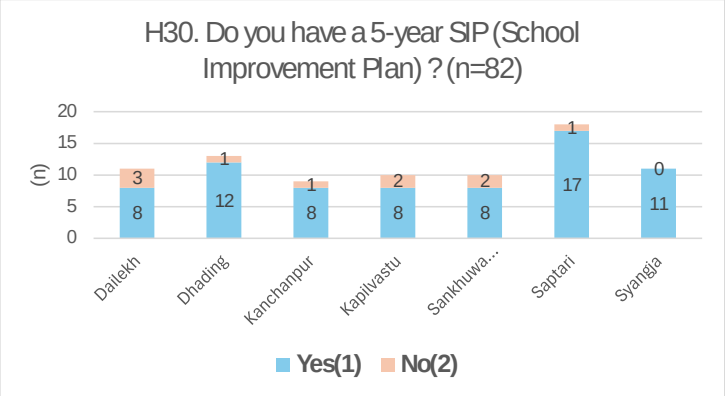
Table 1-135 & Figure 1-129 Do you have a 5-year SIP (School Improvement Plan)?

(n)

District	Yes(1)	No(2)	Total
Dailekh	8	3	11
Dhading	12	1	13
Kanchanpur	8	1	9
Kapilvastu	8	2	10
Sankhuwa	8	2	10
Saptari	17	1	18
Syangja	11	0	11
Total	72	10	82

(%)

District	Yes(1)	No(2)	Total
Dailekh	73%	27%	100%
Dhading	92%	8%	100%
Kanchanpur	89%	11%	100%
Kapilvastu	80%	20%	100%
Sankhuwasabh	80%	20%	100%
Saptari	94%	6%	100%
Syangja	100%	0%	100%
Total	88%	12%	100%



(26) How often do you call SMC meetings in an academic year? (HT31)

The responses to this question are as follows. Many head teachers responded, “7 times or more” (73% responded “yes”). Dhading marks the highest ratio (92%) for this response.

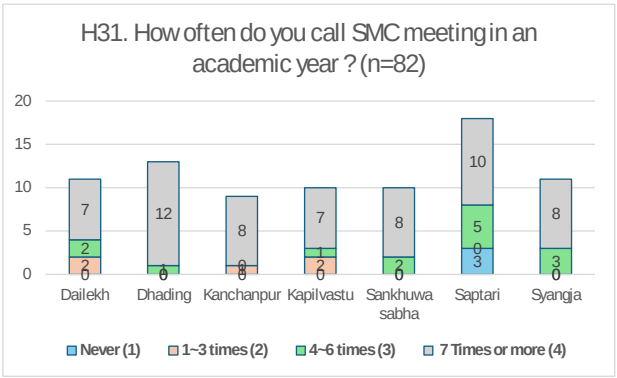
Table 1-136 & Figure 1-130 How often do you call SMC meetings in an academic year?

(n)

District	Never (1)	1~3 times (2)	4~6 times (3)	7 Times or more (4)	Total
Dailekh	0	2	2	7	11
Dhading	0	0	1	12	13
Kanchanpur	0	1	0	8	9
Kapilvastu	0	2	1	7	10
Sankhuwa	0	0	2	8	10
Saptari	3	0	5	10	18
Syangja	0	0	3	8	11
Total	3	5	14	60	82

(%)

District	Never (1)	1~3 times (2)	4~6 times (3)	7 Times or more (4)	Total
Dailekh	0%	18%	18%	64%	100%
Dhading	0%	0%	8%	92%	100%
Kanchanpur	0%	11%	0%	89%	100%
Kapilvastu	0%	20%	10%	70%	100%
Sankhuwasabh	0%	0%	20%	80%	100%
Saptari	17%	0%	28%	56%	100%
Syangja	0%	0%	27%	73%	100%
Total	4%	6%	17%	73%	100%



(27) How often do you call G1-3 parents meeting in an academic year? (HT33)

The responses to this question are as follows. The most frequent response is “1-3 times” (63%). But the second most frequent is “Never” (24%).

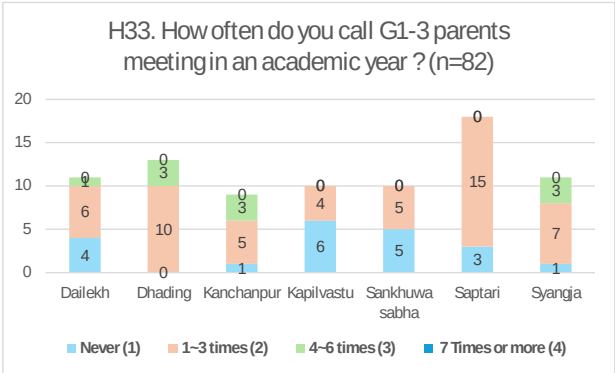
Table 1-137 & Figure 1-131 How often do you call G1-3 parents meeting in an academic year?

(n)

District	Never (1)	1~3 times (2)	4~6 times (3)	7 Times or more (4)	Total
Dailekh	4	6	1	0	11
Dhading	0	10	3	0	13
Kanchanpur	1	5	3	0	9
Kapilvastu	6	4	0	0	10
Sankhuwa	5	5	0	0	10
Saptari	3	15	0	0	18
Syangja	1	7	3	0	11
Total	20	52	10	0	82

(%)

District	Never (1)	1~3 times (2)	4~6 times (3)	7 Times or more (4)	Total
Dailekh	36%	55%	9%	0%	100%
Dhading	0%	77%	23%	0%	100%
Kanchanpur	11%	56%	33%	0%	100%
Kapilvastu	60%	40%	0%	0%	100%
Sankhuwasabh	50%	50%	0%	0%	100%
Saptari	17%	83%	0%	0%	100%
Syangja	9%	64%	27%	0%	100%
Total	24%	63%	12%	0%	100%



(28) SMC Supports in SIP Implementation (HT35)

The responses to this question are as follows. The most frequent response is “Agree” (66%), and the second most is “Strongly agree” (23%). Their total is 89%.

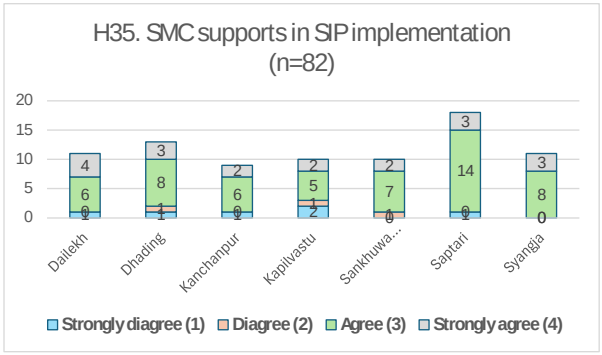
Table 1-138 & Figure 1-132 SMC Supports in SIP implementation

(n)

District	Strongly diagree (1)	Diagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	1	0	6	4	11
Dhading	1	1	8	3	13
Kanchanpur	1	0	6	2	9
Kapilvastu	2	1	5	2	10
Sankhuwa	0	1	7	2	10
Saptari	1	0	14	3	18
Syangja	0	0	8	3	11
Total	6	3	54	19	82

(%)

District	Strongly diagree (1)	Diagree (2)	Agree (3)	Strongly agree (4)	Total
Dailekh	9%	0%	55%	36%	100%
Dhading	8%	8%	62%	23%	100%
Kanchanpur	11%	0%	67%	22%	100%
Kapilvastu	20%	10%	50%	20%	100%
Sankhuwasabh	0%	10%	70%	20%	100%
Saptari	6%	0%	78%	17%	100%
Syangja	0%	0%	73%	27%	100%
Total	7%	4%	66%	23%	100%



1-5-4 Multiple Regression (Tentative, before interventions)

Multiple regression analysis is conducted as the final analysis. To control the difference in the situation between districts, the following coding matrix is developed and included in the regression analysis. Saptari District is set as the standard because its sample size is the largest among the seven districts, making it the most stable.

Table 1-139 District Code Matrix

District name	Dst1	Dst2	Dst3	Dst4	Dst5	Dst6	Dst7
Dailekh	1	0	0	0	0	0	0
Dhading	0	1	0	0	0	0	0
Kanchanpur	0	0	1	0	0	0	0
Kapilvastu	0	0	0	1	0	0	0
Sankhuwasabha	0	0	0	0	1	0	0
Saptari	0	0	0	0	0	0	0
Syangja	0	0	0	0	0	0	1

(Source) IBSE team

The variables in the head teacher survey are included as explanation variables. Several variables are judged as statistically significant at a 1% significance level.

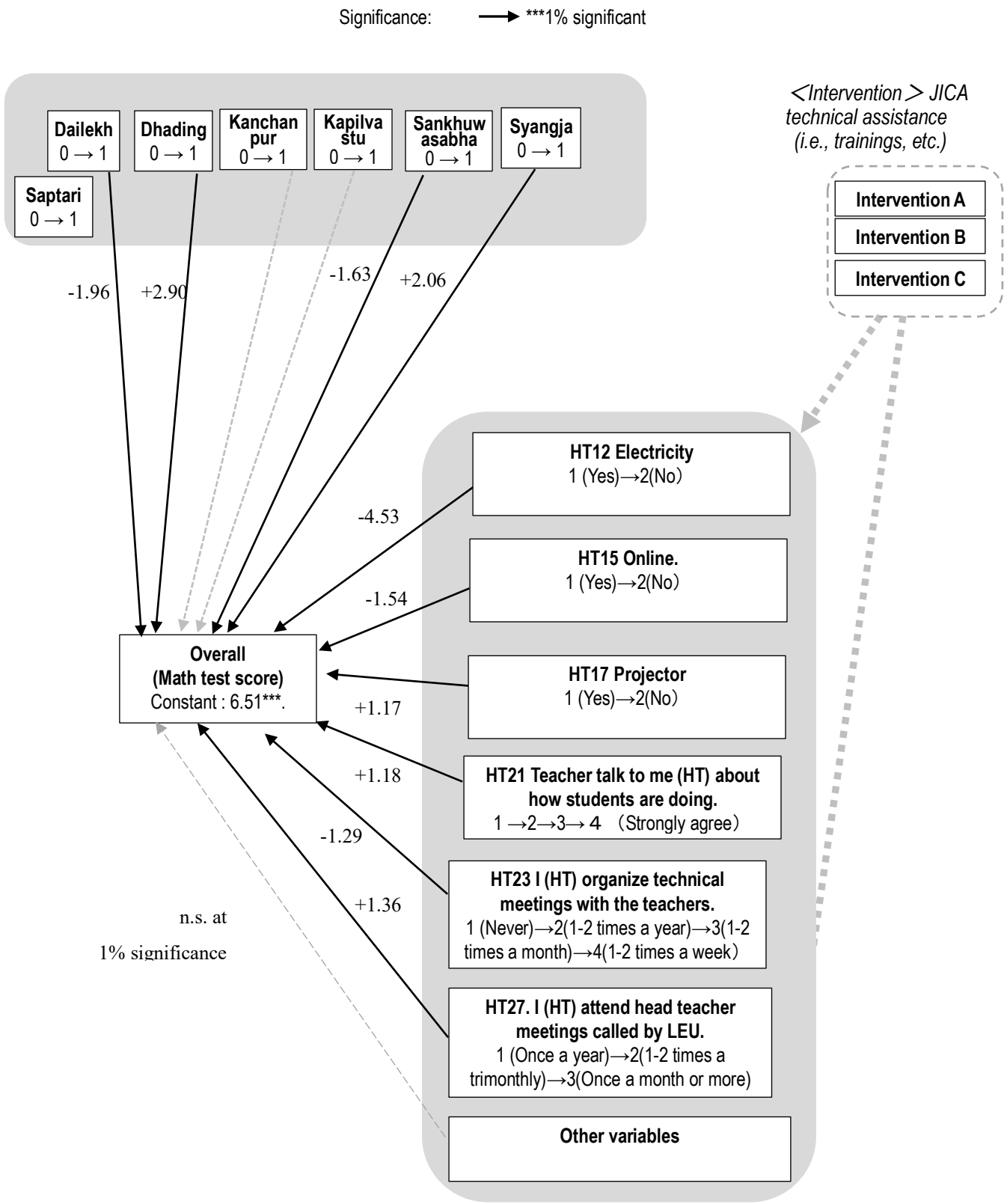
Table 1-140 Multiple Regression Analysis (Tentative, before interventions)

Dependent variable (i.e., Y): Overall (Math test score) n=1,527, R2=0.1959, F=12.57 (p<0.000)

	Response choices	Coefficient	Std. err.	t	p	Star
Dst1	**0→1Dailekh**	**-1.96**	0.54	−3.63	0.00	***
Dst2	**0→1Dhading**	**2.90**	0.45	6.43	0.00	***
Dst3	0→1Kanchanpur	0.37	0.48	0.78	0.44	
Dst4	0→1Kapilvastu	−0.88	0.47	−1.86	0.06	*
Dst5	**0→1Sankhuwasabha**	**-1.63**	0.55	−2.96	0.00	***
Dst6	0→1Saptari	0.00 (omitted)				
Dst7	**0→1Syangja**	**2.06**	0.52	4.00	0.00	***
HT_1Gender	I(Male)->2(Female)	0.28	0.47	0.60	0.55	
HT_4_HTexperience	1(1-5yrs)->2->3->4(16 yrs and more)	0.21	0.13	1.60	0.11	
HT_5_Qualification	1(+2/equivalent)->2(Bachelor)->3(Master or above)	0.47	0.21	2.26	0.02	**
HT_12_Electlicity	**1(Yes)->2(No)**	**-4.53**	0.83	−5.45	0.00	***
HT_13_PC	1(Yes)->2(No)	−0.45	0.69	−0.66	0.51	
HT_14_Internet	1(Yes)->2(No)	0.33	0.71	0.46	0.65	
HT_15_Online	**1(Yes)->2(No)**	**-1.33**	0.40	−3.35	0.00	***
HT_16_Video	1(Yes)->2(No)	0.11	0.33	0.34	0.74	
HT_17_Projector	**1(Yes)->2(No)**	**1.17**	0.38	3.07	0.00	***
HT_18_ICtraining	1(Yes)->2(No)	−0.34	0.25	−1.38	0.17	
HT_19_Observe	1(Yes)->2(No)	0.22	0.18	1.23	0.22	
HT_20_Conslut	1 (Strongly Disagree)→2→3→4(Strongly Agree)	0.61	0.24	2.51	0.01	**
HT_21_Talk_withT_how_students_doing	**1 (Strongly Disagree)→2→3→4(Strongly Agree)**	**1.18**	0.30	3.94	0.00	***
HT_22_Potfolio	1(Yes)->2(No)	0.71	0.31	2.34	0.02	**
HT_23_tech_meeting	**1(Never)->2(1-2times a year)->3(1-2 a month)->4(1-2 a week)**	**-1.29**	0.25	−5.21	0.00	***
HT_25_LessonStudy	1(Yes)->2(No)	−0.47	0.79	−0.59	0.55	
HT_26_LS Conducted	1(Yes)->2(No)	0.19	0.58	0.34	0.74	
HT_27_LEU_HTMeeting	**1(Once year)-> (1-2 trinmothly)->3(Once a month or more)**	**1.36**	0.29	4.67	0.00	***
HT_28_TPDsupport	1(Yes)->2(No)	0.19	0.29	0.65	0.51	
HT_30_SIP_YesNo	1(Yes)->2(No)	0.76	0.41	1.86	0.06	*
HT_31_SMC	1(Never)->2(1-3 times)->3(4-6 times)->4(7 times>)	−0.05	0.20	−0.25	0.80	
HT_33_ParentalMeeting	1(Never)->2(1-3 times)->3(4-6 times)->4(7 times>)	0.05	0.28	0.18	0.86	
HT_35_SMCsupportSIP implementation	1 (Strongly Disagree)→2→3→4(Strongly Agree)	−0.30	0.19	−1.54	0.12	
_cons		4.11	2.98	1.38	0.17	

Significance lebels : ***1%, **5%, *10%, blank(not significant)

Figure 1-133 Multiple Regression Analysis (Tentative, before interventions)



n=1,527. R2=0.2144, F=19.56 ($p<0.001$)

1-6 LEU (Local Education Units) Questionnaire

1-6-1 Samples of LEU

(a) Basic information

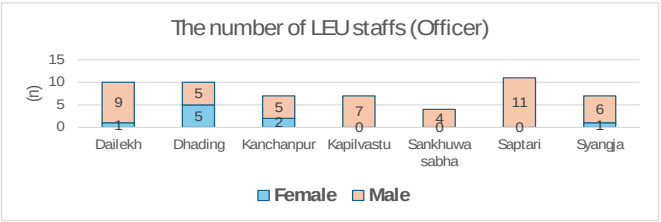
(1) The Number of LEU Staff (L1)

The samples of head LEU officers and non-officers for this baseline report are as follows. The total number is 126.

Table 1-141 and Figure 1-134 The Number of LEU Staff (L1)

(n)

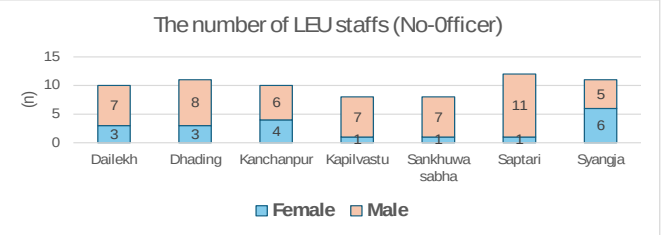
District	Officer		Non-officer		Total
	Female	Male	Female	Male	
Dailekh	1	9	3	7	20
Dhading	5	5	3	8	21
Kanchanpur	2	5	4	6	17
Kapilvastu	0	7	1	7	15
Sankhuwa sabha	0	4	1	7	12
Saptari	0	11	1	11	23
Syangja	1	6	6	5	18
Total	9	47	19	51	126



(%)

District	Officer		Non-officer		Total
	Female	Male	Female	Male	
Dailekh	5%	45%	15%	35%	100%
Dhading	24%	24%	14%	38%	100%
Kanchanpur	12%	29%	24%	35%	100%
Kapilvastu	0%	47%	7%	47%	100%
Sankhu wasabha	0%	33%	8%	58%	100%
Saptari	0%	48%	4%	48%	100%
Syangja	6%	33%	33%	28%	100%
Total	7%	37%	15%	40%	100%

(Note) The responses of "Yes(1)" are counted.



1-6-2 Data for Questionnaire for 7 Districts

(2) Is there a gender focal point in the LG? (L2)

The responses to this question are as follows: nearly half indicated that they have a gender focal point.

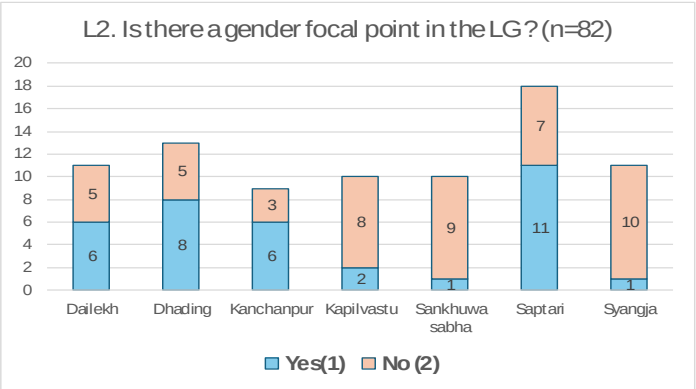
Table 1-142 and Figure 1-135 Is there a gender focal point in the LG? (L2)

(n)

District	Yes(1)	No (2)	Total
Dailekh	6	5	11
Dhading	8	5	13
Kanchanpur	6	3	9
Kapilvastu	2	8	10
Sankhuwa	1	9	10
Saptari	11	7	18
Syangja	1	10	11
Total	35	47	82

(%)

District	Yes(1)	No (2)	Total
Dailekh	55%	45%	100%
Dhading	62%	38%	100%
Kanchanpur	67%	33%	100%
Kapilvastu	20%	80%	100%
Sankhu	10%	90%	100%
Saptari	61%	39%	100%
Syangja	9%	91%	100%
Total	43%	57%	100%



(3) The number of schools, students, and teachers in the LEU (L3)

The responses to these questions are as follows. The total number of schools is 2,647. The total number of teachers is 14,271. The total number of students is 407,673.

Table 1-143 The number of schools, students, and teachers in the LEU (L3)

District	Schools						
	Basic level		Secondary level		Total		
	Up to G5	Up to G8	Up to G8	Up to G12	Basic level	Secondary level	Total
Dailekh	234	73	55	40	307	95	402
Dhading	339	94	85	71	433	156	589
Kanchanpur	71	70	50	61	141	111	252
Kapilvastu	202	79	49	48	281	97	378
Sankhu	222	72	39	27	294	66	360
Saptari	237	92	51	47	329	98	427
Syangja	129	39	38	33	168	71	239
Total	1,434	519	367	327	1,953	694	2,647

District	Teachers										
	Basic level				Secondary level				Total		
	Up to G5	>(G1-5 teachers)	Up to G8	(G1-5 teachers)	Up to G10	(G1-5 teachers)	Up to G12	(G1-5 teachers)	Basic level	Secondary level	Grand total
Dailekh	1,080	-	467	-	495	-	252	-	1,547	747	2,294
Dhading	1,506	-	464	-	541	-	210	-	1,970	751	2,721
Kanchanpur	221	221	516	348	569	291	933	337	737	1,502	2,239
Kapilvastu	1,203	-	268	-	213	-	53	-	1,471	266	1,737
Sankhu	1,080	-	304	-	244	-	72	-	1,384	316	1,700
Saptari	1,526	-	470	-	137	-	79	-	1,996	216	2,212
Syangja	689	-	219	-	218	-	242	-	908	460	1,368
Total	7,305	221	2,708	348	2,417	291	1,841	337	10,013	4,258	14,271

District	Students										
	Basic level				Secondary level				Total		
	Up to G5	(G1-3 students)	Up to G8	(G1-3 students)	Up to G10	(G1-3 teachers)	Up to G12	(G1-3 teachers)	Basic level	Secondary level	Grand total
Dailekh	18,093	-	8,009	-	8,521	-	6,290	-	26,102	14,811	40,913
Dhading	25,392	16,028	13,484	-	8,641	-	6,122	-	38,876	14,763	53,639
Kanchanpur	5,988	2,181	10,288	3,221	16,440	2,720	31,903	2,469	16,276	48,343	64,619
Kapilvastu	42,051	37,248	19,816	-	18,115	-	15,361	-	61,867	33,476	95,343
Sankhu	11,484	1,759	6,760	-	2,997	-	1,359	-	18,244	4,356	22,600
Saptari	65,074	41,033	33,044	-	16,915	-	6,025	-	98,118	22,940	121,058
Syangja	3,108	345	2,737	-	1,982	-	1,674	-	5,845	3,656	9,501
Total	171,190	98,594	94,138	3,221	73,611	2,720	68,734	2,469	265,328	142,345	407,673

(b) Priority of LG and educational plan

(4) What are the top priorities of your LG? (Please tick on the two top priorities) (L4)

The responses to these questions are as follows. Education and social development are the two top priorities (26%).

Table 1-144 and Figure1-136 What are the top priorities of your LG? (Please tick on the two top

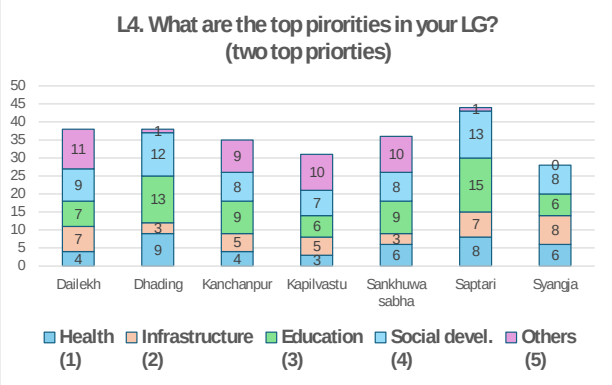
priorities) (L4)

(n)

District	Health (1)	Infrastructure (2)	Education (3)	Social devel. (4)	Others (5)	Total
Dailekh	4	7	7	9	11	38
Dhading	9	3	13	12	1	38
Kanchanpur	4	5	9	8	9	35
Kapilvastu	3	5	6	7	10	31
Sankhuwa	6	3	9	8	10	36
Saptari	8	7	15	13	1	44
Syangja	6	8	6	8	0	28
Total	40	38	65	65	42	250

(%)

District	Healt (1)	Infrastructure (2)	Education (3)	Social devel. (4)	Others (5)	Total
Dailekh	11%	18%	18%	24%	29%	100%
Dhading	24%	8%	34%	32%	3%	100%
Kanchanpur	11%	14%	26%	23%	26%	100%
Kapilvastu	10%	16%	19%	23%	32%	100%
Sankhuwasabh	17%	8%	25%	22%	28%	100%
Saptari	18%	16%	34%	30%	2%	100%
Syangja	21%	29%	21%	29%	0%	100%
Total	16%	15%	26%	26%	17%	100%



(5) Do you have a periodic plan for the education sector? (L5)

The responses to this question are as follows. The total ratio of "Yes" is 40%. The highest of this ratio is Kanchanpur (78%), and the lowest is Syangja (0%).

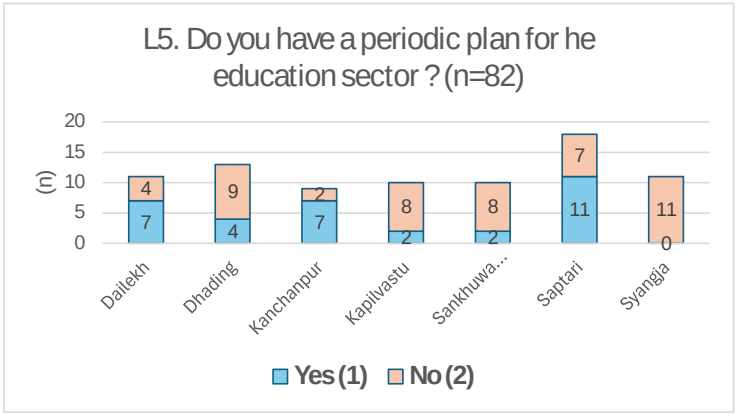
Table 1-145 and Figure 1-137 Do you have a periodic plan for the education sector? (L5)

(n)

District	Yes (1)	No (2)	Total
Dailekh	7	4	11
Dhading	4	9	13
Kanchanpur	7	2	9
Kapilvastu	2	8	10
Sankhuwa	2	8	10
Saptari	11	7	18
Syangja	0	11	11
Total	33	49	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	64%	36%	100%
Dhading	31%	69%	100%
Kanchanpur	78%	22%	100%
Kapilvastu	20%	80%	100%
Sankhuwa	20%	80%	100%
Saptari	61%	39%	100%
Syangja	0%	100%	100%
Total	40%	60%	100%



(6) What are the top priorities of your education plan? (Please tick on the three top priorities) (L6)

The responses to these questions are as follows. "Improvement of early grade" is the top priority (30%).

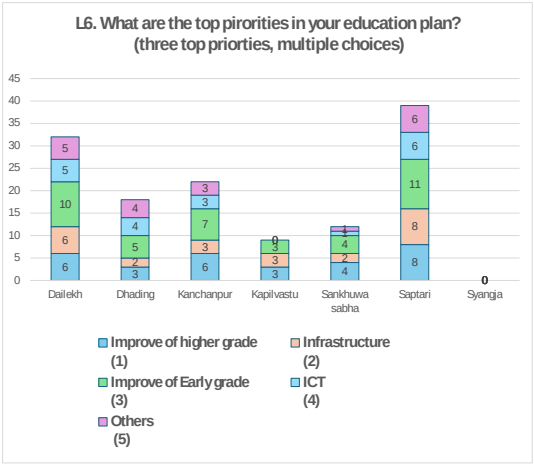
Table 1-146 and Figure 1-138 What are the top priorities of your education plan? (Please tick on the three top priorities) (L6)

(n)

District	Improve of higher grade (1)	Infrastructure (2)	Improve of Early grade (3)	ICT (4)	Others (5)	Total
Dailekh	6	6	10	5	5	32
Dhading	3	2	5	4	4	18
Kanchanpur	6	3	7	3	3	22
Kapilvastu	3	3	3	0	0	9
Sankhuwa sabha	4	2	4	1	1	12
Saptari	8	8	11	6	6	39
Syangja	0	0	0	0	0	0
Total	30	24	40	19	19	132

(%)

District	Improve of higher grade (1)	Infrastructure (2)	Improve of Early grade (3)	ICT (4)	Others (5)	Total
Dailekh	19%	19%	31%	16%	16%	100%
Dhading	17%	11%	28%	22%	22%	100%
Kanchanpur	27%	14%	32%	14%	14%	100%
Kapilvastu	33%	33%	33%	0%	0%	100%
Sankhuwasabh a	33%	17%	33%	8%	8%	100%
Saptari	21%	21%	28%	15%	15%	100%
Syangja	0%	0%	0%	0%	0%	0%
Total	23%	18%	30%	14%	14%	100%



(c) Teacher training

(7) Does the LEU have a personal computer (PC) for teacher training? (L10)

The responses to this question are as follows. The ratio of "Yes" is only 38%. The highest of this ratio is Dailekh (55%), and the lowest is Syangja (18%).

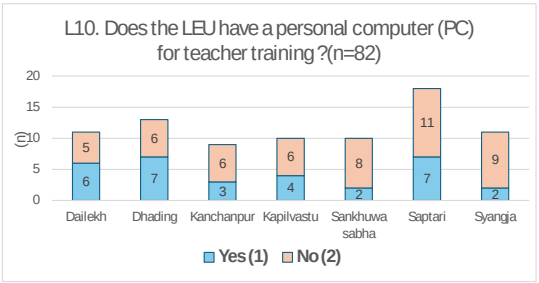
Table 1-147 and Figure 1-139 Does the LEU have a personal computer (PC) for teacher training? (L10)

(n)

District	Yes (1)	No (2)	Total
Dailekh	6	5	11
Dhading	7	6	13
Kanchanpur	3	6	9
Kapilvastu	4	6	10
Sankhuwa	2	8	10
Saptari	7	11	18
Syangja	2	9	11
Total	31	51	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	55%	45%	100%
Dhading	54%	46%	100%
Kanchanpur	33%	67%	100%
Kapilvastu	40%	60%	100%
Sankhuwasabh	20%	80%	100%
Saptari	39%	61%	100%
Syangja	18%	82%	100%
Total	38%	62%	100%



(8) Does the LEU have a projector with a screen for teacher training? (L11)

The responses to this question are as follows. The ratio of "Yes" is only 46%. The highest of this ratio is Dhading (77%), and the lowest is Dailekh and Kanchanpur (both 22%).

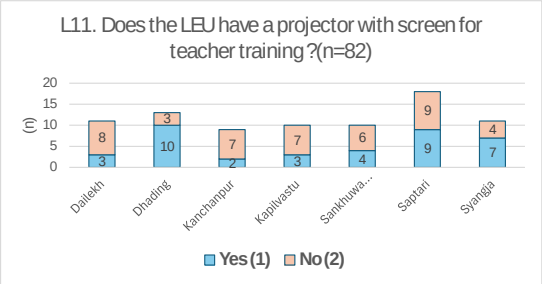
Table 1-148 and Figure 1-140 Does the LEU have a projector with a screen for teacher training? (L11)

(n)

District	Yes (1)	No (2)	Total
Dailekh	3	8	11
Dhading	10	3	13
Kanchanpur	2	7	9
Kapilvastu	3	7	10
Sankhuwa	4	6	10
Saptari	9	9	18
Syangja	7	4	11
Total	38	44	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	27%	73%	100%
Dhading	77%	23%	100%
Kanchanpur	22%	78%	100%
Kapilvastu	30%	70%	100%
Sankhuwasabh	40%	60%	100%
Saptari	50%	50%	100%
Syangja	64%	36%	100%
Total	46%	54%	100%



(9) Can the LEU provide a venue with a PC, projector, and screen for teacher training? (L12)

The responses to this question are as follows. The ratio of "Yes" is only 78%. The highest of this ratio is Syangja (91%), and the lowest is Dailekh (64%).

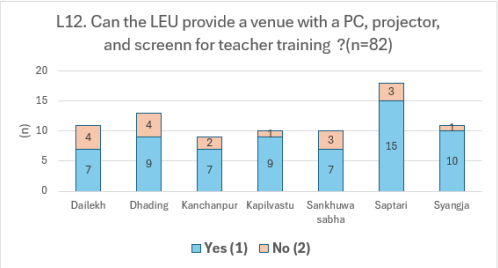
Table 1-149 and Figure 1-141 Can the LEU provide a venue with a PC, projector, and screen for teacher training? (L12)

(n)

District	Yes (1)	No (2)	Total
Dailekh	7	4	11
Dhading	9	4	13
Kanchanpur	7	2	9
Kapilvastu	9	1	10
Sankhuwa	7	3	10
Saptari	15	3	18
Syangja	10	1	11
Total	64	18	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	64%	36%	100%
Dhading	69%	31%	100%
Kanchanpur	78%	22%	100%
Kapilvastu	90%	10%	100%
Sankhuwasabha	70%	30%	100%
Saptari	83%	17%	100%
Syangja	91%	9%	100%
Total	78%	22%	100%



(10) Does the training venue have internet access? (L13)

The responses to this question are as follows. The ratio of "Yes" is 87%. The highest of this ratio is Kanchanpur (100%), and the lowest is Dailekh (73%).

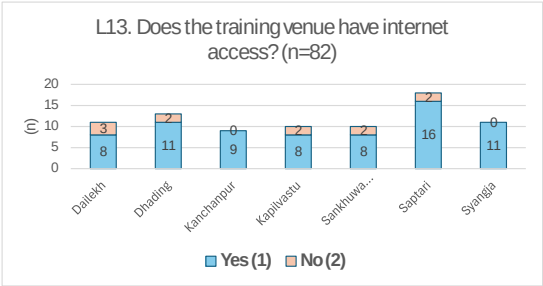
Table 1-150 and Figure 1-142 Does the training venue have internet access? (L13)

(n)

District	Yes (1)	No (2)	Total
Dailekh	8	3	11
Dhading	11	2	13
Kanchanpur	9	0	9
Kapilvastu	8	2	10
Sankhuwa	8	2	10
Saptari	16	2	18
Syangja	11	0	11
Total	71	11	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	73%	27%	100%
Dhading	85%	15%	100%
Kanchanpur	100%	0%	100%
Kapilvastu	80%	20%	100%
Sankhuwasabh	80%	20%	100%
Saptari	89%	11%	100%
Syangja	100%	0%	100%
Total	87%	13%	100%



(11) Is there a camera for interactive online training? (L14)

The responses to this question are as follows. The ratio of "Yes" is only 6%. The highest of this ratio is Dhading (15%). Dailekh, Kanchanpur, Kapilvastsu and Sankhuwasabha do not have a camera (0%).

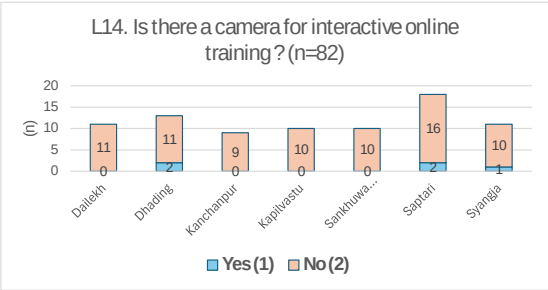
Table 1-151 and Figure 1-143 Is there a camera for interactive online training? (L14)

(n)

District	Yes (1)	No (2)	Total
Dailekh	0	11	11
Dhading	2	11	13
Kanchanpur	0	9	9
Kapilvastu	0	10	10
Sankhuwa	0	10	10
Saptari	2	16	18
Syangja	1	10	11
Total	5	77	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	0%	100%	100%
Dhading	15%	85%	100%
Kanchanpur	0%	100%	100%
Kapilvastu	0%	100%	100%
Sankhuwasabh	0%	100%	100%
Saptari	11%	89%	100%
Syangja	9%	91%	100%
Total	6%	94%	100%



(12) Do you ensure that there is no gender gap in the number of participants when selecting participants for teacher training? (L15)

The responses to this question are as follows. The ratio of "Yes" is 89%. The highest of this ratio is Kanchanpur (100%), and the lowest is Saptari (78%).

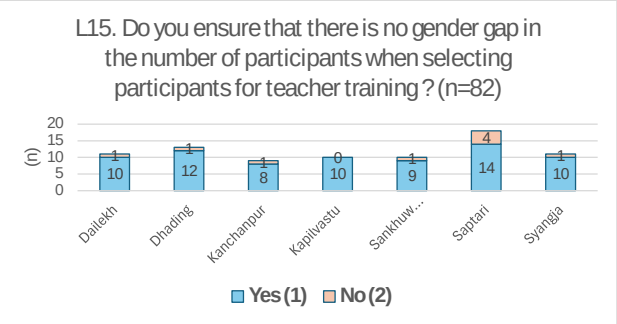
Table 1-152 and Figure 1-144 Do you ensure that there is no gender gap in the number of participants when selecting participants for teacher training? (L15)

(n)

District	Yes (1)	No (2)	Total
Dailekh	10	1	11
Dhading	12	1	13
Kanchanpur	8	1	9
Kapilvastu	10	0	10
Sankhuwa	9	1	10
Saptari	14	4	18
Syangja	10	1	11
Total	73	9	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	91%	9%	100%
Dhading	92%	8%	100%
Kanchanpur	89%	11%	100%
Kapilvastu	100%	0%	100%
Sankhuwasabh	90%	10%	100%
Saptari	78%	22%	100%
Syangja	91%	9%	100%
Total	89%	11%	100%



(13) How many times a 5-day customized teacher training on G1-3 conducted in the last fiscal year? (L16)

The responses to these questions are as follows. The most frequent response is 1 time (63%), and the second most frequent is 0 time (30%).

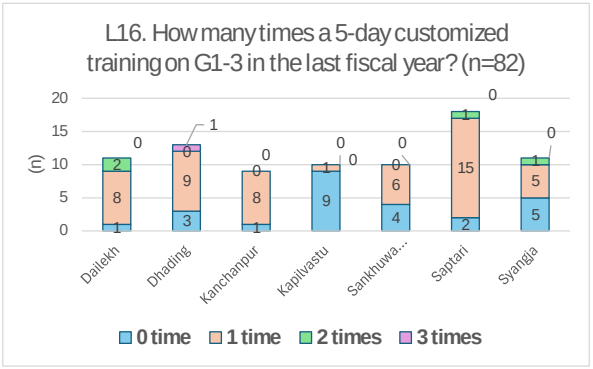
Table 1-153 and Figure 1-145 How many times a 5-day customized teacher training on G1-3 conducted in the last fiscal year? (L16)

(n)

District	0 time	1 time	2 times	3 times	Total
Dailekh	1	8	2	0	11
Dhading	3	9	0	1	13
Kanchanpur	1	8	0	0	9
Kapilvastu	9	1	0	0	10
Sankhuwa	4	6	0	0	10
Saptari	2	15	1	0	18
Syangja	5	5	1	0	11
Total	25	52	4	1	82

(%)

District	0 time	1 time	2 times	3 times	Total
Dailekh	9%	73%	18%	0%	100%
Dhading	23%	69%	0%	8%	100%
Kanchanpur	11%	89%	0%	0%	100%
Kapilvastu	90%	10%	0%	0%	100%
Sankhuwasabh	40%	60%	0%	0%	100%
Saptari	11%	83%	6%	0%	100%
Syangja	45%	45%	9%	0%	100%
Total	30%	63%	5%	1%	100%

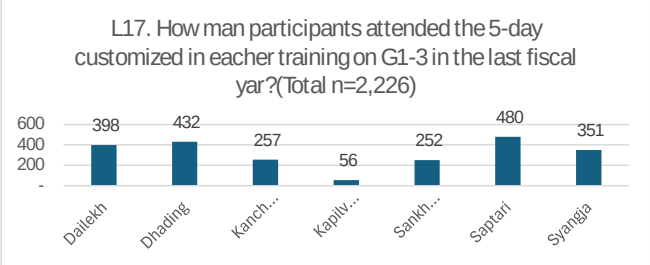


(14) How many participants attended the 5-day customized teacher training on G1-3 in the last fiscal year? (L17)

The responses to this question are as follows. Total participants are 2,226. The percentage of Kapilvastu is the lowest (3%).

Table 1-154 and Figure 1-146 How many participants attended the 5-day customized teacher training on G1-3 in the last fiscal year? (L17)

District	n of participants	(%)
Dailekh	398	18%
Dhading	432	19%
Kanchanpur	257	12%
Kapilvastu	56	3%
Sankhuwa	252	11%
Saptari	480	22%
Syangja	351	16%
Total	2,226	100%



(15) Do you plan to conduct 5-day customized teacher training in this fiscal year? (L19)

The responses to this question are as follows. The ratio of "Yes" is 87%. The highest of this ratio is Dailekh, Dhading and Syangja (100%), and the lowest is Sankhuwasabha (60%).

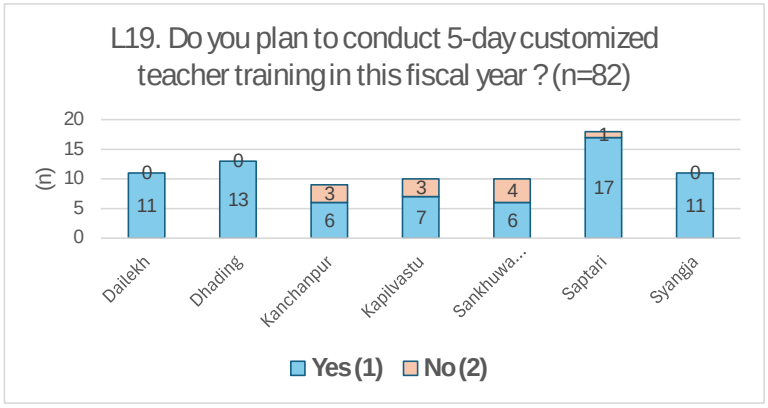
Table 1-155 and Figure 1-147 Do you plan to conduct 5-day customized teacher training in this fiscal year? (L19)

(n)

District	Yes (1)	No (2)	Total
Dailekh	11	0	11
Dhading	13	0	13
Kanchanpur	6	3	9
Kapilvastu	7	3	10
Sankhuwa	6	4	10
Saptari	17	1	18
Syangja	11	0	11
Total	71	11	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	100%	0%	100%
Dhading	100%	0%	100%
Kanchanpur	67%	33%	100%
Kapilvastu	70%	30%	100%
Sankhuwasabh	60%	40%	100%
Saptari	94%	6%	100%
Syangja	100%	0%	100%
Total	87%	13%	100%



(16) Do you plan to conduct 5-day customized teacher training? => If yes, number of batches (L20)

The responses to these questions are as follows. The most frequent response is 1 time (44%), and the second most frequent is 2 time (26%). Many LGs in Dhading plan 3 times.

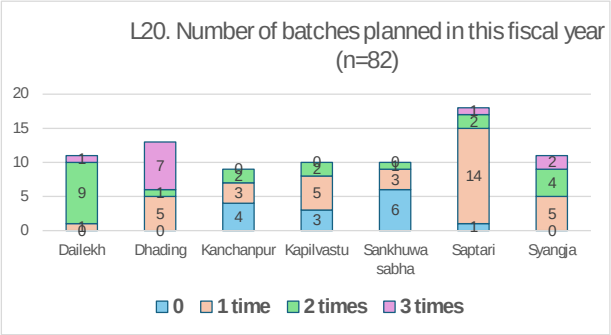
Table 1-156 and Figure 1-148 Do you plan to conduct 5-day customized teacher training? => If yes, number of batches (L20)

(n)

District	0	1 time	2 times	3 times	Total
Dailekh	0	1	9	1	11
Dhading	0	5	1	7	13
Kanchanpur	4	3	2	0	9
Kapilvastu	3	5	2	0	10
Sankhuwa	6	3	1	0	10
Saptari	1	14	2	1	18
Syangja	0	5	4	2	11
Total	14	36	21	11	82

(%)

District	0	1 time	2 times	3 times	Total
Dailekh	0%	9%	82%	9%	100%
Dhading	0%	38%	8%	54%	100%
Kanchanpur	44%	33%	22%	0%	100%
Kapilvastu	30%	50%	20%	0%	100%
Sankhuwasabh	60%	30%	10%	0%	100%
Saptari	6%	78%	11%	6%	100%
Syangja	0%	45%	36%	18%	100%
Total	17%	44%	26%	13%	100%



(d) Improvement of quality of learning

(17) Do you receive the training/orientation program about the integrated curriculum? (L23)

The responses to this question are as follows. The ratio of "Yes" is 59%. The highest of this ratio is Syangja (73%), and the lowest is Kapilvastu (40%).

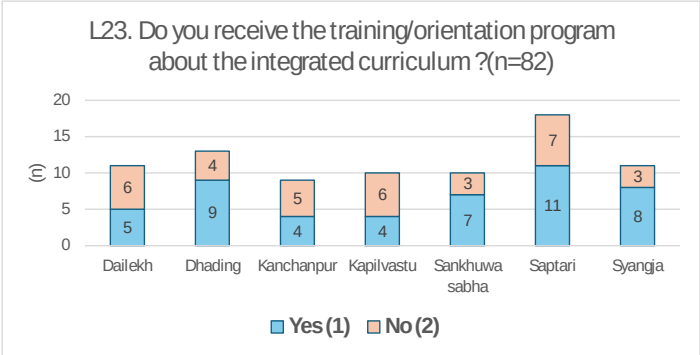
Table 1-157 and Figure 1-149 Do you receive the training/orientation program about the integrated curriculum? (L23)

(n)

District	Yes (1)	No (2)	Total
Dailekh	5	6	11
Dhading	9	4	13
Kanchanpur	4	5	9
Kapilvastu	4	6	10
Sankhuwa	7	3	10
Saptari	11	7	18
Syangja	8	3	11
Total	48	34	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	45%	55%	100%
Dhading	69%	31%	100%
Kanchanpur	44%	56%	100%
Kapilvastu	40%	60%	100%
Sankhuwasabh	70%	30%	100%
Saptari	61%	39%	100%
Syangja	73%	27%	100%
Total	59%	41%	100%



(18) How often do you hold the head teacher meetings? (L24)

The responses to these questions are as follows. The most frequent response is once a month or more (57%), and the second most frequent is 2-3 times a month (41%).

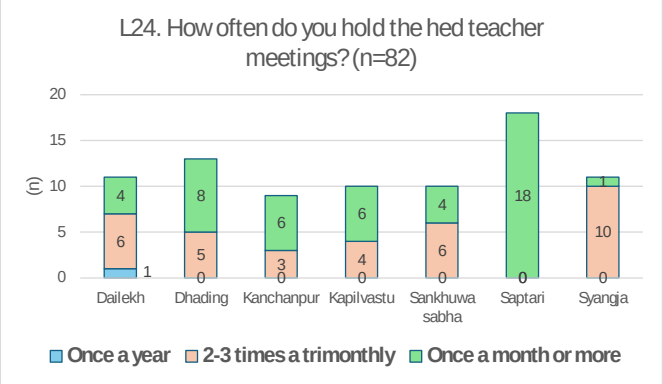
Table 1-158 and Figure 1-150 How often do you hold the head teacher meetings? (L24)

(n)

District	Once a year	2-3 times a trimonthly	Once a month or more	Total
Dailekh	1	6	4	11
Dhading	0	5	8	13
Kanchanpur	0	3	6	9
Kapilvastu	0	4	6	10
Sankhuwa	0	6	4	10
Saptari	0	0	18	18
Syangja	0	10	1	11
Total	1	34	47	82

(%)

District	Once a year	2-3 times a trimonthly	Once a month or more	Total
Dailekh	9%	55%	36%	100%
Dhading	0%	38%	62%	100%
Kanchanpur	0%	33%	67%	100%
Kapilvastu	0%	40%	60%	100%
Sankhuwasabh	0%	60%	40%	100%
Saptari	0%	0%	100%	100%
Syangja	0%	91%	9%	100%
Total	1%	41%	57%	100%



(19) Do you have a plan/strategy to improve the quality of student learning, especially in early grades? (L25)

The responses to this question are as follows. The ratio of "Yes" is 63%. The highest of this ratio is Dhading (77%), and the lowest is Dailekh (45%).

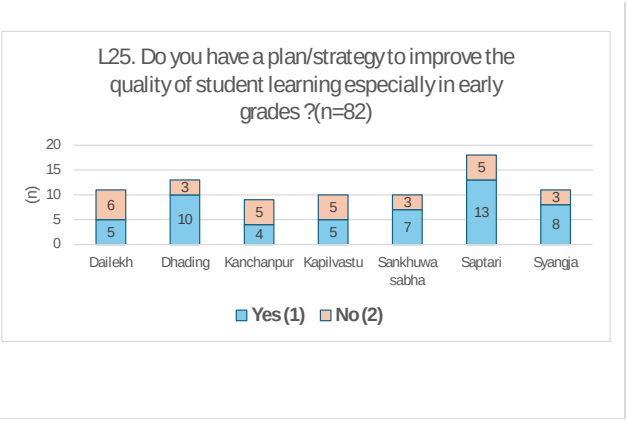
Table 1-159 and Figure 1-151 Do you have a plan/strategy to improve the quality of student learning, especially in early grades? (L25)

(n)

District	Yes (1)	No (2)	Total
Dailekh	5	6	11
Dhading	10	3	13
Kanchanpur	4	5	9
Kapilvastu	5	5	10
Sankhuwa	7	3	10
Saptari	13	5	18
Syangja	8	3	11
Total	52	30	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	45%	55%	100%
Dhading	77%	23%	100%
Kanchanpur	44%	56%	100%
Kapilvastu	50%	50%	100%
Sankhuwasabh	70%	30%	100%
Saptari	72%	28%	100%
Syangja	73%	27%	100%
Total	63%	37%	100%



(20) Does it address the gender issue? (L26)

The responses to this question are as follows. The ratio of "Yes" is 76%. The highest of this ratio is Dailekh (100%), and the lowest is Kapilvastu (63%).

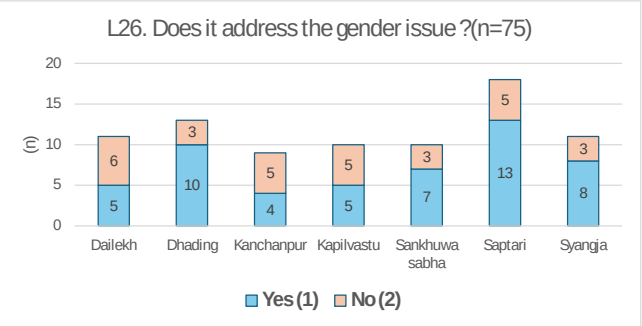
Table 1-160 and Figure 1-152 Does it address the gender issue? (L26)

(n)

District	Yes (1)	No (2)	Total
Dailekh	7	0	7
Dhading	11	1	12
Kanchanpur	6	3	9
Kapilvastu	5	3	8
Sankhuwa	7	3	10
Saptari	13	5	18
Syangja	8	3	11
Total	57	18	75

(%)

District	Yes (1)	No (2)	Total
Dailekh	100%	0%	100%
Dhading	92%	8%	100%
Kanchanpur	67%	33%	100%
Kapilvastu	63%	38%	100%
Sankhuwasabh	70%	30%	100%
Saptari	72%	28%	100%
Syangja	73%	27%	100%
Total	76%	24%	100%



(e) TPD support

(21) Do you assign subject-wise Roster Experts (RE) in your LG? (L27)

The responses to this question are as follows. The ratio of "Yes" is only 33%. The highest of this ratio is Dhading (46%), and the lowest is Syangja (0 %).

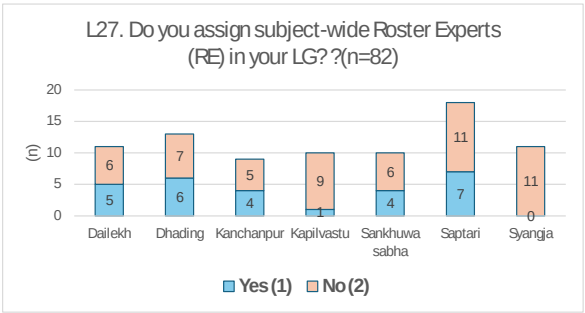
Table 1-161 and Figure 1-153 Do you assign subject-wise Roster Experts (RE) in your LG? (L27)

(n)

District	Yes (1)	No (2)	Total
Dailekh	5	6	11
Dhading	6	7	13
Kanchanpur	4	5	9
Kapilvastu	1	9	10
Sankhuwa	4	6	10
Saptari	7	11	18
Syangja	0	11	11
Total	27	55	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	45%	55%	100%
Dhading	46%	54%	100%
Kanchanpur	44%	56%	100%
Kapilvastu	10%	90%	100%
Sankhuwasabha	40%	60%	100%
Saptari	39%	61%	100%
Syangja	0%	100%	100%
Total	33%	67%	100%



(22) Does LG allocate the budget for the mobilization of RE?[20] (L29)

The responses to this question are as follows. The ratio of "Yes" is only 18%. The highest of this ratio is Saptari (39%), and the lowest is Kapilvastu and Syangja (0 %).

Table 1-162 and Figure 1-154 Does LG allocate the budget for the mobilization of RE? (L29)

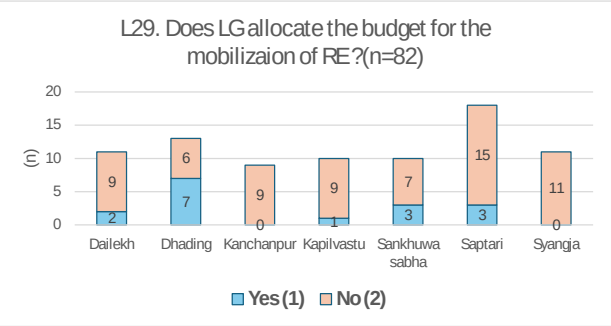
[20] Information was not collected from the head teachers of the 12 schools where REs are assigned by the LGs, whose budgets are not appropriated by the LGs.

(n)

District	Yes (1)	No (2)	Total
Dailekh	1	10	11
Dhading	3	10	13
Kanchanpur	2	7	9
Kapilvastu	0	10	10
Sankhuwa	2	8	10
Saptari	7	11	18
Syangja	0	11	11
Total	15	67	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	9%	91%	100%
Dhading	23%	77%	100%
Kanchanpur	22%	78%	100%
Kapilvastu	0%	100%	100%
Sankhuwasabha	20%	80%	100%
Saptari	39%	61%	100%
Syangja	0%	100%	100%
Total	18%	82%	100%



(23) Do you assign experts other than RE in your LG? (L31)

The responses to this question are as follows. The ratio of "Yes" is only 20%. The highest of this ratio is Dhading (54%), and the lowest is Kanchanpur and Syangja (0%).

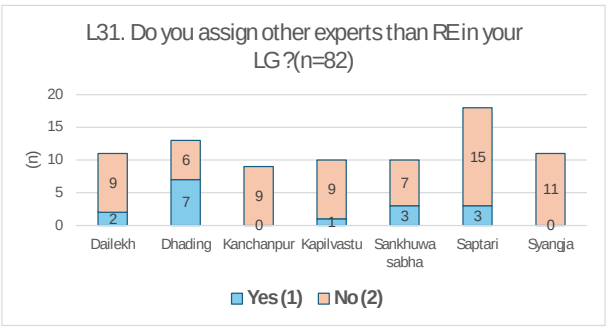
Table 1-163 and Figure 1-155 Do you assign experts other than RE in your LG? (L31)

(n)

District	Yes (1)	No (2)	Total
Dailekh	2	9	11
Dhading	7	6	13
Kanchanpur	0	9	9
Kapilvastu	1	9	10
Sankhuwa	3	7	10
Saptari	3	15	18
Syangja	0	11	11
Total	16	66	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	18%	82%	100%
Dhading	54%	46%	100%
Kanchanpur	0%	100%	100%
Kapilvastu	10%	90%	100%
Sankhuwasabha	30%	70%	100%
Saptari	17%	83%	100%
Syangja	0%	100%	100%
Total	20%	80%	100%



(24) Are they Resource Person (RP) or other experts? (L32)

The responses to this question are as follows. The ratio of "Yes" is only 10%. The highest of this ratio is Dhading (31%), and the lowest is Kanchanpur and Syangja (0%).

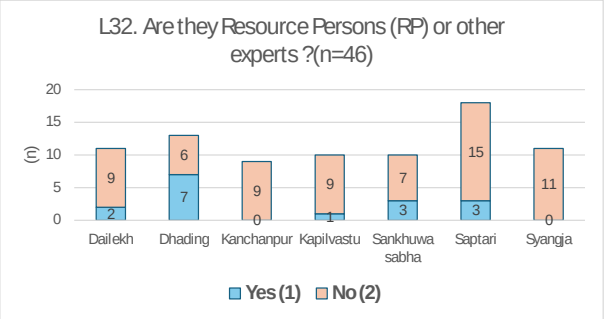
Table 1-164 and Figure 1-156 Are they Resource Person (RP) or other experts? (L32)

(n)

District	Yes (1)	No (2)	Total
Dailekh	1	10	11
Dhading	4	7	11
Kanchanpur	0	0	0
Kapilvastu	1	0	1
Sankhuwa	1	8	9
Saptari	1	2	3
Syangja	0	11	11
Total	8	38	46

(%)

District	Yes (1)	No (2)	Total
Dailekh	9%	91%	100%
Dhading	31%	54%	85%
Kanchanpur	0%	0%	0%
Kapilvastu	10%	0%	10%
Sankhuwasabha	10%	80%	90%
Saptari	6%	11%	17%
Syangja	0%	100%	100%
Total	10%	46%	56%



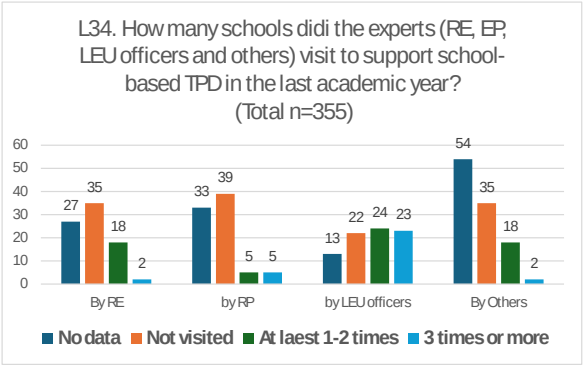
(25) How many schools did the experts (RE, RP, LEU officers and others) visit to support school-based TPD in the last academic year? (L34)

The responses to these questions are as follows. LEU officers frequently visit their schools (At least 1-2 times (29%) and 3 times or more (28%) in the last academic year.

Table 1-165 and Figure 1-157 How many schools did the experts (RE, RP, LEU officers and others) visit to support school-based TPD in the last academic year? (L34)

	By RE	by RP	by LEU officers	By Others	Total
No data	27	33	13	54	127
Not visited	35	39	22	35	131
At laest 1-2 time	18	5	24	18	65
3 times or more	2	5	23	2	32
Total	82	82	82	109	355

	By RE	by RP	by LEU officers	By Others	Total
No data	33%	40%	16%	50%	36%
Not visited	43%	48%	27%	32%	37%
At laest 1-2 time	22%	6%	29%	17%	18%
3 times or more	2%	6%	28%	2%	9%
Total	100%	100%	100%	100%	100%



(f) Educational project

(26) Are there any donor/NGO-funded education projects for G1-3 working in your LG? (L35)

The responses to this question are as follows. The ratio of "Yes" is 61%. The highest of this ratio is Saptari (100%) and the lowest is Dhading (31%).

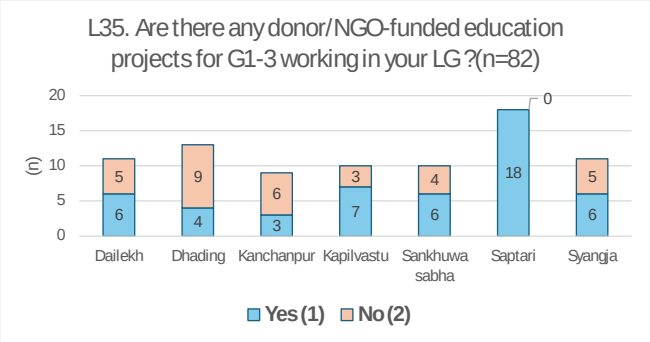
Table 1-166 and Figure 1-158 Are there any donor/NGO-funded education projects for G1-3 working in your LG? (L35)

(n)

District	Yes (1)	No (2)	Total
Dailekh	6	5	11
Dhading	4	9	13
Kanchanpur	3	6	9
Kapilvastu	7	3	10
Sankhuwa	6	4	10
Saptari	18	0	18
Syangja	6	5	11
Total	50	32	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	55%	45%	100%
Dhading	31%	69%	100%
Kanchanpur	33%	67%	100%
Kapilvastu	70%	30%	100%
Sankhuwasabh	60%	40%	100%
Saptari	100%	0%	100%
Syangja	55%	45%	100%
Total	61%	39%	100%



(27) Do they address the gender issue? (L36)

The responses to this question are as follows. The ratio of "Yes" is 56%. The highest of this ratio is Saptari (94%) and the lowest is Dhading (31%).

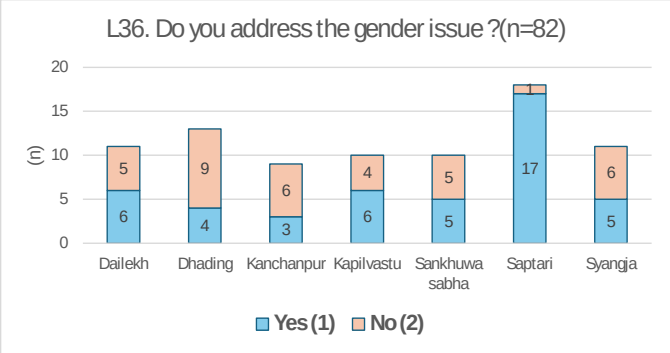
Table 1-167 and Figure 1-159 Do they address the gender issue? (L36)

(n)

District	Yes (1)	No (2)	Total
Dailekh	6	5	11
Dhading	4	9	13
Kanchanpur	3	6	9
Kapilvastu	6	4	10
Sankhuwa	5	5	10
Saptari	17	1	18
Syangja	5	6	11
Total	46	36	82

(%)

District	Yes (1)	No (2)	Total
Dailekh	55%	45%	100%
Dhading	31%	69%	100%
Kanchanpur	33%	67%	100%
Kapilvastu	60%	40%	100%
Sankhuwasabh	50%	50%	100%
Saptari	94%	6%	100%
Syangja	45%	55%	100%
Total	56%	44%	100%



(28) What subjects and grades are covered in the projects? (Multiple answers possible) (L37)

<Subject>

The responses to these questions are as follows. The ratio of "Mero Nepali" is 34% and "My Math" is 32%.

Table 1-168 and Figure 1-160 What subjects and grades are covered in the projects? (Multiple answers possible) (L37)

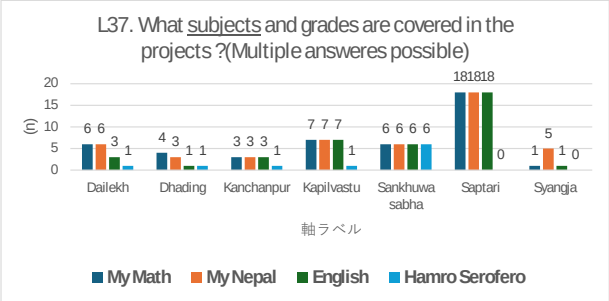
<Subject>

(n)

District	My Math	My Nepal	English	Hamro Serofero	Total
Dailekh	6	6	3	1	16
Dhading	4	3	1	1	9
Kanchanpur	3	3	3	1	10
Kapilvastu	7	7	7	1	22
Sankhuwa	6	6	6	6	24
Saptari	18	18	18	0	54
Syangja	1	5	1	0	7
Total	45	48	39	10	142

(%)

District	My Math	My Nepal	English	Hamro Serofero	Total
Dailekh	38%	38%	19%	6%	100%
Dhading	44%	33%	11%	11%	100%
Kanchanpur	30%	30%	30%	10%	100%
Kapilvastu	32%	32%	32%	5%	100%
Sankhuwasabh	25%	25%	25%	25%	100%
Saptari	33%	33%	33%	0%	100%
Syangja	14%	71%	14%	0%	100%
Total	32%	34%	27%	7%	100%



<Grade>

The responses to these questions are as follows. Three grades receive support to nearly the same extent.

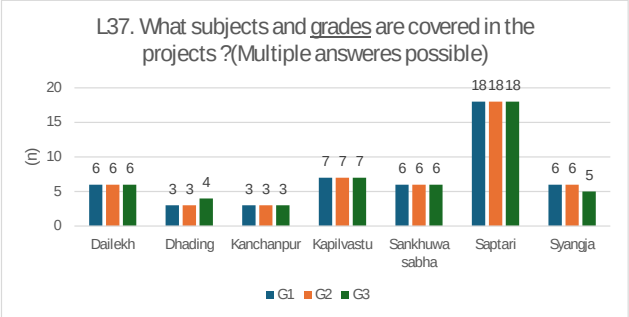
Table 1-169 and Figure 1-161 What subjects and grades are covered in the projects? (Multiple answers possible) (L37)

(n)

District	G1	G2	G3	Total
Dailekh	6	6	6	18
Dhading	3	3	4	10
Kanchanpur	3	3	3	9
Kapilvastu	7	7	7	21
Sankhuwa	6	6	6	18
Saptari	18	18	18	54
Syangja	6	6	5	17
Total	49	49	49	147

(%)

District	G1	G2	G3	Total
Dailekh	33%	33%	33%	100%
Dhading	30%	30%	40%	100%
Kanchanpur	33%	33%	33%	100%
Kapilvastu	33%	33%	33%	100%
Sankhuwasabh	33%	33%	33%	100%
Saptari	33%	33%	33%	100%
Syangja	35%	35%	29%	100%
Total	33%	33%	33%	100%



1-7 EDCU (Education Development and Coordination Unit)

(1) Number of EDCU Staff

The number of EDCU staff is shown in the table below. There are no female officers in all EDCUs. Except for Kanchanpur, there are several vacant positions.

Table 1-170 Number of EDCU Staff

District	Officer		Non-officer		Vacant position
	Female	Male	Female	Male	
Dailekh	0	0	1	5	Vacant Position 1 (Officer)
Dhading	0	1	0	1	Vacant position: EDCU chief-1, Officer-1, Technical Assistant -1
Kanchanpur	0	3	1	1	-
Kapilvastu	0	3	1	3	Vacant position: Technical Assistant: 1
Sankhuwasabha	0	1	1	1	Support Staff-2, and vacant position: 1 Technical Officer
Saptari	0	2	0	2	Vacant position: Under Secretary-1
Syangja	0	2	0	2	Vacant position:1 SO and 1 TA

(2) Facilities for Teacher Training

The availability of the facilities for teacher training is shown in the table below. Most EDCUs generally have PCs and projectors. As for the screen, it may be more convenient these days to use a monitor that can connect to the internet rather than a projection screen.

Regarding the training venue, five EDCUs have suitable rooms for the training with internet access. However, only EDCU in Syangja has a camera for interactive training.

Table 1-171 Facilities for Teacher Training

District	PC	Projector	Screen	Room for training	Internet access in training room	Camera for interactive training at EDCU
Dailekh	○	×	×	×	-	-
Dhading	○	○	×	○	○	×
Kanchanpur	○	○	○	○	○	×
Kapilvastu	○	○	×	×	-	-
Sankhuwasabha	○	○	Monitor	○	○	×
Saptari	○	○	×	○	○	×
Syangja	○	○	×	○	○	○

○：available ×：not available

(3) LEU Support

All EDCUs answered that they had meetings with LEU 1-2 times in three months last year. EDCU in Kaplivastu also practiced holding meetings via a WhatsApp group.

Regarding LEU attendance at the meetings, almost all EDCUs reported full attendance, except for Sankhuwasabha, where the attendance rate is 70-80% for each meeting. EDCU Dhading reported that it is difficult to attend all the meetings from LEU due to only one staff member being available in most of the LEU. The main agenda of the meetings includes program planning and orientation.

Furthermore, EDCUs occasionally monitor LEU activities through onsite observation, reporting and reflection in the meeting. EDCU in Kanchanpur sometimes organized online meetings with LEUs for their monitoring purpose.

(4) Teacher Training

There are no teacher training activities, particularly for early grades in EDCU, though they usually provide job induction training for newly recruited teachers using their own budget. (e.g. NPR 800,000 in Kanchanpur)

(5) Education Project supported by NGO/DPs

In the four districts, USAID Early Grade Learning Projects are currently underway. In Sankhuwasabha, one local NGO, UWS Nepal, has been implementing the teacher fellow program, five days of training

for developing educational materials in collaboration with the local government on a cost-sharing basis (50% funded by the project and 50% by the local government).

Table 1-172 Education Project for Grades 1-3

District	NGO/DPs	Started year	Subjects				Grade		
			Math	Nepali	English	Hamro Serofero	G1	G2	G3
Dailekh	USAID	2023	○	○	-	-	○	○	○
Dhading	-	-	-	-	-	-	-	-	-
Kanchanpur	USAID	2023	○	○	-	-	○	○	○
Kapilvastu	USAID	2024	○	○	○	○	○	○	○
Sankhuwasabha	UWS Nepal		-	-	-	-	-	-	-
Saptari	USAID	2024	○	○	○	○	○	○	○
Syangja	Room to Read[21]	2022	○	○	○	○	○	○	○

○ : target subjects and grades

[21] Room to Read is an INGO actively working in Syangja district with their local partner NGO Suryodaya Club, primarily in Kaligandaki and Arjun Chaupari Rural Municipalities. However, they are also collaborating with other local governments in Syangja to implement their programs. Their core objective is to improve Nepali language literacy for students in Grades 1, 2, and 3. The organization has developed its own structured teaching model, which focuses on helping young children learn Nepali letters and words within a specific time frame. A key criterion for their program is that at least 10 students must be enrolled in Grade 1 for implementation to take place. Without meeting this requirement, schools may not be eligible for the program. Room to Read collaborates with the EDCU and respective LEUs.

Appendix II. Integrated Curriculum (IC) Survey

2-1 Issues Identified from Classroom Observation Sheets

2-1-1 Mathematics

(1) Aggregated results

The areas and schools observed in this survey are shown in Table 2-1. The selection criteria for the schools were based on two regions: the Terai and Hill areas. Due to the limited time available for the survey, schools deemed standard within the regions were selected from easily accessible local governments (LGs). Four lessons were observed during the study. Notably, Lesson 1 utilized the English version of the CDC workbook, while the other three used the Nepali versions developed by the CDC.

Table 2-1 Name and Location of the School for Classroom Observation

	Area	District	LG	School	Grade	Number of students	Date of survey
L1	Terai	Kanchanpur	Krishnapur	Krishna Secondary	G1	18	Nov. 17, 2024
L2					G3	25	Nov. 17, 2024
L3	Hill	Dhadhing	Thakre	Adarsha secondary	G3	13	Nov. 28, 2024
L4				Chandi Bhumi	G2	9	Nov. 28, 2024

L: lesson

Based on the Lesson Observation Tool developed by CDC, the common features observed across the four lessons are summarized in the table below.

Table 2-2 Results of Lesson Observation

SN.	Indicators	Description
1	The class began with relevant and engaging activities	**L1: N.A.** **L2:** While checking students' belongings, some were found lacking the necessary materials. **L3:** The lesson started immediately (not necessarily a negative point). Students began with all required materials ready. **L4:** The lesson started promptly with a clear explanation of the topic. Students were focused, and this approach worked well.
2	The class was interactive and participatory	**L1:** Interactive in the sense that students listened carefully to the teacher's instructions. **L2:** There was no interaction between students who understood the material and those who didn’t. **L3:** Students participated actively, but interaction was largely limited to one-on-one exchanges between the teacher and individual students. Peer interaction mainly consisted of copying answers, which is a significant issue. **L4:** The same issue was observed. However, there were positive peer interactions where students verified their answers with each other without copying. Teachers, however, failed to recognize or encourage such behavior.

3	Utilized purposeful and relevant Teaching materials	**L1, L3:** There were issues with the use of workbooks. Teachers planned lessons arbitrarily, repeatedly teaching previously covered material while neglecting some topics entirely. The choice of materials and problems did not adequately consider students' learning levels. **L2:** Before aiming for purposeful learning, some students lacked essential tools like rulers, and no care was taken to address this. Ensuring all students are equipped for learning is crucial. **L4:** It appeared that students were not familiar with the concept of color coding.[22]
4	Equal learning opportunity were provided	**L1:** Individual learning time was ensured. **L2:** In a measurement activity, students measured different lengths, making it impossible to verify the correct answers collectively. **L3:** While individual learning opportunities were provided, many students struggled to solve problems and resorted to copying answers, indicating a lack of actual learning. **L4:** Due to insufficient explanation by the teacher, some students worked on the wrong problems. Varying progress among students made it difficult for the teacher to check their understanding.
5	Individual differences among students were addressed in the teaching process.	**L3:** There were students with developmental delays, and while the teacher provided individual support, these students remained isolated. This highlights challenges in fostering inclusion. **L1, L2, L4:** In group settings, students who didn't understand the material remained passive. There are issues in guiding students on how to engage with each other.
6	Engaged students in supplementary activities beyond those provided in the workbook.	**L1-4:** Many students struggled with the current lesson's tasks, making it unrealistic to address content beyond the workbook. Instead of introducing new activities or problems, the focus should be on ensuring students grasp the essential points of the lesson.
7	Conducted teaching activities with effective time management	**L1, L4:** Teachers only assigned simple problems that most students could solve, leading to lessons that ended as planned and on time. However, more difficult and essential problems were not addressed, so completing the lesson on schedule cannot be praised. **L2:** While a significant amount of time was allocated for group activities, students lacked the skills to learn collaboratively, resulting in weaker students simply copying answers. This rendered the extended group activity time ineffective.
8	Assessed students' learning achievement using appropriate tools	**L1:** The students were completely unable to read word problems. Some students could not read a word problem even after spending about three minutes. **L4:** Many students could barely read the Nepali language in their workbooks. It is likely that they do not understand the meaning of word problems. **L1-4:** Approximately 10% of students were able to provide correct answers, while the majority struggled to do so independently. **L1-4:** Assessment methods were uniform across all lessons. Teachers checked the notebooks of students who completed tasks, which is commendable for personal assessment. However, this approach fails to assess students who could not provide correct answers, highlighting a major issue. Other assessment tools are not immediately necessary; instead, it is crucial to revisit points where many students struggle and encourage them to think critically.
9	Conducted	**L1, L3, L4:** When checking answers, teachers explained the correct method to

[22] Focus group interviews revealed that teachers were not aware of this color coding either.

	remedial teaching	students with mistakes, which is positive. However, this method doesn't allow teachers to follow up on similar mistakes made by other students. Thus, the current individual remedial teaching approach has its limitations. In large classrooms, remedial teaching that encourages students to verify and discuss their misunderstandings with each other is necessary.
10	Reviewed and provided feedback on student responses	**L1-4**: A common issue across all lessons was the lack of classroom-wide reviews of student mistakes. Mathematics learning remains individualistic, as it was during the COVID-19 era, failing to utilize the collaborative learning environment schools can offer.
11	Wrapped up the lesson effectively and appropriately	**L1-4:** Teachers concluded lessons by announcing the correct answers. While this serves as a summary for now, it is insufficient. A proper conclusion should include a review of challenging points and confirmation of newly learned content. None of the lessons observed provided such guidance.

(2) Issues

Teaching the Decimal System and Multiplication

Since the existing Lesson Observation Tool does not include an item related to the lesson content, a critical issue regarding this is pointed here. A significant issue commonly seen in 4 lessons is that the teaching and learning process does not base on the decimal system. The workbook content is structured based on the decimal system, where numbers are considered in units of ten. However, in lessons L1, L3, and L4, both teachers and students recognize numbers by counting individual sticks without unit of ten or hundred. This approach makes it extremely difficult for students to handle operations like addition, subtraction, multiplication, and division. Moreover, multiplication is taught without using the multiplication table; instead, repeated addition is used for calculations. This is another major concern.

Copying Answers

Students who cannot solve problems immediately copy answers from their friends. This practice leads to mere memorization of answers without understanding. The primary cause of this issue seems to be that teachers only engage with students who provide answers and focus solely on whether the answers are correct or not.

Issue of Individualism

Teachers are adept at engaging with students on an individual basis. Consequently, students develop the habit of interacting only with teachers personally. Under these circumstances, introducing pair work or group work does not lead to meaningful interaction among students. For effective peer learning, Nepalese maths education needs to incorporate and establish rules that encourage students to engage with their classmates during the learning process.

(3) Key observations

The issues observed in the four lessons with their possible solutions are summarized in Table 2-3. To enhance clarity, titles have been added to each problem.

Table 2-3 Key observations

S.N.	Title	Key Observation	Possible Solutions
1	Equal starting opportunities	Teachers must also recognize the differences in starting points for students with varying abilities and ensure that all students have an equal starting foundation. For instance, they should be able to say at the beginning of class, "If you don't have a ruler, let me know, or borrow one from a classmate."	Teachers need to figure out the exact level of students' prior knowledge base and have to build on the lesson with equal opportunities. They should also address the needs of varied ability students. For the given instances, there is a need of guidance that enables quiet students to cinfidently say, "Can I borrow that?"
2	Seating arrangement and pair work	In the observed class, students did not learn how to collaborate with their peers, resulting in scattered interactions and some students not engaging with anyone at all.	To foster calm and effective cooperative learning in lower grades, it is essential to first assign specific pairs, such as saying, "Today, you will work with her." Moreover, seating arrangement appropriate for pair work and group work should be managed.
3	What to do and how far to go	During activities, students often did not know what to do or in what sequence. Many students did not lack understanding but simply did not know the steps. Without clear instructions, they cannot complete tasks on their own and instead resort to copying or doing only what they are told (e.g., merely transcribing someone else's notes). The teacher's role is to ensure students understand the task and process.	It is advisable to clarify the task and process well. For this, it is necessary to utilise the concept checking questions (CCQ) and instruction checking questions (ICQ) ensuring that students understand what to do and how far to go.
4	Differences in tasks among students	This was a significant issue. One student's measurement result was not shared or cross-verified with others. If students performed the same task, they could engage in confirmation activities, such as re-measuring together. Moreover, teachers often failed to facilitate peer confirmation activities. For students, learning ended once they completed their own measurements.	It is better to use the same task to have a clear concept, then go for differentiated tasks for the learning consolidation. The teacher should encourage co-operative learning, peer and group activities to foster students' engagement in conformation activities.
5	Repeating simple problems	In L1, L3, and L4, the lessons focused only on problems that students could already solve. In L1, the simplest carry-over problems were repeatedly practiced. In L4, although the lesson was supposed to teach three-digit subtraction with borrowing, it was limited to two-digit subtraction with borrowing. As a result, many students in L1 quickly found the correct answers and lost interest. Furthermore, in L3, word problems were skipped entirely. When asked why, the teacher responded that it was because the students could not solve them.	It is better to use varied tasks as per students' ability. Teacher can introduce challenging ones for students who has already mastered the basic ones, and foundational ones for those to catch up with the basic problems.

2-1-2 Nepali Language

(1) Aggregated result

The selection of schools for classroom observation was based on regional representation. Schools were chosen from one district each in the Himalayan, Hill, and Tarai regions, as well as from Eastern, Central, and Western Nepal. Two schools were selected from different local governments within each district, making a total of six schools. Due to the limited time available for the survey, schools deemed standard within the regions were selected from easily accessible local governments (LGs). Six lessons were observed during the study. Out of six schools, five were secondary and one was a basic school (L3), where Grades 1, 2, and 3 were observed. A total of 6 classes were observed during this period.

All those schools were found to be using Nepali workbooks developed by the CDC (Curriculum Development Center).

Table 2-4 Name and Location of the School for Classroom Observation

S.N.	Area	District	LG	School	Grade	Lesson	No. of pupil	Date of survey
L1	Hilly	Syangja	Waling	Upallo Pekhu Secondary	G1	Lesson 22: Tihar	6	Dec. 12, 2024
L2	Hilly	Syangja	Galyang	Janaki Secondary	G2	Lesson 17: Jatra	11	Dec. 13, 2024
L3	Himalayan	Sankhuwasabha	Khandbari	Himalaya Basic School	G1	N/A	14	Dec, 26, 2024
L4	Himalayan	Sankhuwasabha	Chaipur	Saraswati Secondary	G1	Lesson 19: Jhumke Bulake	6	Dec, 27, 2024
L5	Tarai	Kanchanpur	Bhimdatta	Maheswor Secondary	G2	Lesson 12: Shabda ko kram milaune	26	Jan. 9, 2025
L6	Tarai	Kanchanpur	Dhodhara Chandani	Sharada Saraswati Secondary	G3	Lesson 10: Dhartilai Bachaun	15	Jan. 9, 2025

L = Lesson

Based on the Lesson Observation Tool developed by CDC, the common features observed across the six lessons are summarized in the table .

Table 2-5 Results of Lesson Observation

SN.	Indicators	Description
1	The class began with relevant and engaging activities	**L1:** The lesson was started with relevant background related to the text. Students were focused on the lesson. **L2:** Students' belongings along with breakfast were checked and the lesson was begun with relevant background. Students were focused on the lesson. **L3:** Student's workbooks were checked; nobody brought the Nepali workbook in the class. The lesson was started immediately writing a sentence in the white board. **L4:** The lesson started promptly with a clear explanation of the topic. Students

		were focused. **L5:** The lesson was begun without any background and relevant activities. **L6:** Lesson was started describing the picture related to the text, half of the students did not bring the book.
2	The class was interactive and participatory	**L1:** Interactive in the sense that students followed the lyrics to the teacher and students sang the lyric by group and individual. **L2:** Students were engaged in reading and writing question answer but no one interacted with the teacher. **L3:** Students were participated one by one to read the sentence writing on the board but the class was no interactive. **L4:** Students were engaged to follow the teacher's lyric and to identify the 'Jha' alphabet. However, it lacked the sequential teaching strategy i.e. 'I Do, We Do, You Do' approach. **L5:** Engaged to rearrange the correct word of the sentence writing in the board. **L6:** Participatory to song the lyric. Some were not engaging but teacher did not care them.
3	Utilized purposeful and relevant Teaching materials	**L1, L2, and L4:** Workbook, letter card and word card were used but no use of local materials related to the text. No lesson plan. There should be used of chart paper. **L3:** No teaching materials except white board and marker. **L5:** No Lesson Plan and relevant materials. Teaching of previously taught lesson. **L6:** Teaching without preplan, no relevant teaching materials. Some of the student lacked even of the workbook however teacher did not address them.
4	Equal learning opportunity were provided	**L1, L2, and L4:** Learning opportunity were equally provided by group and individual **L3:** Teacher made students read out the sentence one by one but half of the students did not get turn. Only the clever students got the opportunity. **L5:** Equal learning opportunity were provided to rearrange the word and verify the answer. **L6:** Some students did not pronounce difficult words correctly due to lack of Sequential Teaching Strategy.
5	Individual differences among students were addressed in the teaching process.	**L1, L2:** The students lagging behind in studies were not concentrated. Teacher tried to address them but was not insufficient. **L3, L4:** It was addressed partially. L5, l6: Individual differences among students were identified but there were issues in guiding students on how to engage with each other.
6	Engaged students in supplementary activities beyond those provided in the workbook.	**L1-6:** No supplementary activities were done.
7	Conducted teaching activities with effective time management	**L1:** The identification of the letter 'Ta' was practised, however, students already know about it. So, completing the lesson on schedule was not praised. **L2:** Comprehensive question answer was done in time but some students had written wrong spelling. It was not remedied. **L3:** N/A **L4:** Most of time was consumed for lyric but in the identification of the letter 'Jha' of the different places in the word was difficult to the students. **L5:** Writing skill was done in the board however students had already written in their book. So, time management did not matter. **L6:** It was effective within time.
8	Assessed students' learning achievement using appropriate tools	**L1-6:** Assessment methods were uniform across all lessons. Reading and writing skills were checked according to the text but the documentation of the learning achievement was not done as IC.

9	Conducted remedial teaching	**L4:** Teacher checked the written answers and made corrections. However, it would have been better to provide opportunity to verify the answer each other at first.
10	Reviewed and provided feedback on student responses	**L1, L4:** If the students did not identify and pronounce the letter, teacher did correction immediately. **L2, L5:** Teacher provided feedback individually. **L6:** Teacher wrote down the difficult words on the board and practiced to correct pronunciation. A common issue across all lessons was the lack of interaction from different perspectives and overall review of the student mistakes.
11	Wrapped up the lesson effectively and appropriately	**L1-6:** The classes were not properly wrapped up. A proper conclusion should include a review of challenging points and confirmation of newly learned content. None of the lessons observed provided such guidance.

(2) Issues

Use of Teaching Materials

Teachers should facilitate learning by using teaching materials such as charts, picture cards, word cards, and alphabet cards as needed. In L1, L2, and L4, the use of these materials made the learning process effective. However, in other classes, such materials were not used, and learning facilitation was not effective.

Teachers' Subject Specific Knowledge

The Government of Nepal has no provision of subject-specific teachers for grades 1–5. Teachers who have not studied Nepali as a major subject in higher education are also teaching Nepali at the basic level. In such cases, a lack of subject knowledge among teachers has led to issues with accurate writing in the Nepali language. For example, in L3, the teacher made five spelling mistakes while writing a single sentence on the board after referring to the workbook. Similarly, in L5, there were problems with syntax in a sentence written by the teacher. Upon discussing with them after class, it was found that they had not studied Nepali as a major subject in higher education.

Multilingual Classroom Teaching

While teaching students with different mother tongues, their native language should also be used to facilitate learning. In L6, although there were students with Doteli as their mother tongue, the teaching did not incorporate their language, which left the students confused.

Development of Soft Skills in Learning Facilitation

The integrated curriculum emphasizes not only developing subject knowledge in an integrated manner but also the development of soft skills through effective learning facilitation. However, in all classes, there was no focus on essential skills such as personal skills, interpersonal skills, and civic skills. As a result, it appears that the educational objectives outlined in the curriculum are not being adequately achieved.

Teacher Unawareness of Workbook Instructions and Color Coding

In classroom activities, the workbooks and workbooks include clear instructions based on color coding:

- **Red** activities require full teacher support.
- **Blue** activities require partial teacher support.
- **Green** activities are meant for peer learning or practice with a study partner.
- **Orange** activities are for independent practice by each student.

Despite these explicit guidelines provided in the teacher's manual, teachers were found to be unaware of them. For example, in an L5 class, a red-coded activity designed for speaking skill practice was instead conducted as a writing exercise, with only partial support from the teacher.

(3) Key observations

The issued observed in the six lessons and their solutions are summarized in Table 2-6. To enhance clarity, titles have been added to each problem.

Table 2-6 Key observations

	Title	Key Observation	Possible Solutions
1	Classroom Management	Effective classroom management is essential for language teaching at the basic level. Teaching activities are more effective when the physical structure of the classroom is child-friendly. Classrooms should display materials such as chart papers, alphabet charts, vowel-consonant (Bārahkhari) charts, word cards, sentence cards, pictures, and their labels. In L1 and L2, these materials were well-organized, resulting in effective learning facilitation. However, in L3–L6, such materials were not adequately managed, leading to less effective learning facilitation. Additionally, no subject-specific schedules were displayed in any classroom. This created challenges for absent students in identifying lessons they had missed.	Teachers needs manage the classroom in such a way that they are able to use teaching materials for effective learning facilitation. The materials to be used should be as per the lesson need to fulfill the learning outcomes rather than just to display.
2	Supplementary Reading Materials	To develop language skills, teachers are instructed in the teacher's manual to use supplementary reading materials in addition to the workbook prepared by the CDC. In L1–L3, the use of supplementary materials was observed. For instance, in L1, even grade1 students were able	For this purpose, a book corner library can also be set up and utilised. Moreover, teacher can also recommend some graded reading materials from library. Preparing decodable books by teachers can be one of the best alternatives to suit students' reading ability and needs.

		to read simple sentences. However, in L6, no use of supplementary materials was noted, resulting in grade3 students struggling to read simple sentences.	
3	Teachers' Preparation Before Class	There was a lack of proper preparation by teachers before entering the classroom, such as creating lesson plans and preparing teaching materials. Instead, a traditional approach of relying on students' books to conduct lessons was observed among all teachers. For example, in L3, when a student did not bring their workbook, the teacher turned to a page in the teacher's manual available in the classroom, wrote a sentence from the instructions on the board, and asked the students to read it. Later, when asked which page and topic had been taught, the teacher could not locate the page again. This indicates a lack of preparation regarding what to teach, how to teach, which materials to use, soft skills, and time management before entering the classroom.	A well-structured lesson plan or teacher's preparation is necessary for this. Alternatively, a wise utilisation of teacher's guide can be helpful. If a teacher is of another subject background and is teaching another subject, then it is deemed necessary to prepare the subject content as well.
4	Discussion and Questioning Based on Prior Knowledge	The practice of initiating learning facilitation with discussions and questioning based on prior knowledge relevant to the lesson was found to be minimal. For instance, in L1, the teacher made a brief attempt to provide background information about Tihar; in L2, about festivals; and in L6, about the Earth. However, sufficient discussion based on students' prior knowledge was not conducted. In other classes, no such practice was observed. As a result, students did not get the opportunity, as directed in the teacher's manual, to engage in turn-by-turn questioning based on their observations, predict various aspects of the topic, or gather maximum information through discussion.	Teachers have to teach the lessons based on the previous knowledge students have already acquired. They have to build on learning through discussions, sharing and questioning. They have to focus on thematic discussions, relatedness and usability of lesson contents and skills.
5	Learning Facilitation Process	Overall, the state of learning facilitation appears to be traditional. Teachers primarily read lessons from the workbook and teach students to read, focusing solely on subject matter. The teaching follows a deductive method, with no implementation of progressive	The curriculum has intended to use varied instructional methods. Teachers should have aqequate knowledge and skills on use of these learning facilitation principles, methods and strategies as mentioned or intended in the curriculum. They schould also follow differentiated instructions, hands-on activities so as to develop the learning outcomes as assumed by the

		learning strategies or assessment support in the classroom. The teaching process lacks the strategies necessary to achieve the behavioral skills and learning outcomes prescribed by the curriculum. This reliance on traditional methods undermines the development of modern, skill-based, and interactive learning practices in the classroom.	curriculum.
7	Integrated Teaching	According to the concept of the integrated curriculum, teachers are instructed to integrate related subjects while teaching the topic with common theme. However, in all the observed lessons, there was no awareness or implementation of interdisciplinary or integrated teaching.	Teacher seemed to have less or no clear understanding of the thematic integration across subjects and developing soft skills through the learning facilitation process. Therefore, it is recommendable to provide a thorough skill development training regarding the integrated teaching as assumed by the curriculum.
8	Subject-specific Teaching	Subject-specific teaching was observed in all schools. However, the integrated subjects of the curriculum can only be effectively taught through grade-teaching. The curriculum itself promotes the concept of grade-teaching methods, but the use of such methods was not observed in practice.	Grade teaching is most favorable for integrated teaching. Alternatively, co-planning the lesson with other teachers together may solve the issue to some extent.
9	Assessment Process	The workbook includes a learning ladder for assessment at the end of the workbook. As well as assessment activities are provided at the end of each lesson on a blue page. However, the use of these assessment tools was not observed in all classrooms. When asked about this, the teachers indicated that they were unaware of them. Even teachers who had received training mentioned that they had no knowledge of these assessment activities.	The solution can be simplification of the assessment portion of the curriculum. On the other, it is advised to orient all teachers about the assessment process and tools. Audio-visual facilitation materials can also be one of the alternatives.

2-1-3 English

(1) Aggregated results

The areas and schools observed in the study are shown in Table 2-7. Three districts were randomly selected to represent three geographical regions in Nepal: Terai, Hill, and Mountain. Sankhuwasabha represented a mountainous region. Syangja represented hill. Kanchanpur represented Terai. One school, each of the two local levels from the selected districts, was chosen for classroom observation and focus group meeting (FGD). The schools deemed standard within the regions were selected from easily

accessible local governments (LGs). One English lesson in each school was observed during the study. Altogether, six lessons in total were observed. The following table presents the details of the lessons observed.

Table 2-7 Participants and Location of the School for Classroom Observation

S. N	Area	District	LG	Grade	Lesson	Number of students	Date of Survey
L1	Hilly	Syangja	Waling	G3	Lesson 1: Panche Baja	7	Dec. 12, 2024
L2	Hilly	Syangja	Galyang	G3	Lesson 2: Read and Answer	9	Dec. 13, 2024
L3	Himalayan	Sankhuwasabha	Khandbari	G3	Lesson 3: Saturday	7	Dec. 26, 2024
L4	Himalayan	Sankhuwasabha	Chainpur	G2	Lesson 4: Weather	14	Dec. 27, 2024
L5	Terai	Kanchanpur	Bheemdatt	G2	Lesson 5: Head and Soldiers	26	Jan. 9, 2024
L6	Terai	Kanchanpur	Dodhara Chandani	G1	Lesson 6: My House	11	Jan. 10, 2024

L1 = Lesson one, G1 = Grade one, and so on.

Based on the Adaptation of Lesson Observation Tool developed by CDC, the common features observed across the six lessons are summarized in the table below.

Table 2-8 Results of Lesson Observation

S.N.	Indicators	Description
1	Lesson preparation	**L1-L6:** In the observed lessons, teachers entered the classroom without any written plan. However, during informal conversations after class, all of these teachers said that they had some kind of mental plan. Proactive planning and documentation of teacher activities in the classroom are almost missing.
2	Beginning of the lesson and student engagement	**L1, L4:** The class began with an explanation in Nepali. All students in the classroom had their workbooks and copies with them. The teacher began the lesson by writing the topic "Panche Baja" on the whiteboard and by asking students to open the book on page 156 of their workbook. **L2:** The teacher began his lesson in English. Students had all the required materials ready. While checking students' belongings, some were found lacking the necessary materials. **L3:** The teacher asked students to open the book on page 62. Then, he asked, "How many days are there in a week?", "Which is your favorite day?" The lesson was focused, and students participated actively and engaged in the lesson. **L5:** The teacher began the classroom by asking to see the poster. She also asked her students to act by touching different parts of their bodies as given in the picture. **L6:** The teacher began the lesson by asking about their house.
3	Classroom interaction	**L1:** Active interaction and participation of students in naming musical instruments in their local context (Panche Baja). Students actively listened to the teacher and

	and participation	followed the teacher's instructions. Classroom interaction was primarily in Nepali. **L2:** The teacher explained everything in English. He asked questions in English and encouraged students to answer. However, students didn't interact in English. There was no interaction between students who understood the material and those who didn't. The lesson was mostly one-way communication. Students were reluctant to speak. **L3, L4, L6:** Teachers explained both in English and Nepali. Students participated actively, but the interaction was largely limited to one-on-one exchanges between the teacher and individual students. **L5:** The teacher taught the students as if teaching for higher-level classes. She spoke fast enough, making catching up difficult for small children. Peer interaction was lacking.
4	Utilization of purposeful and relevant teaching materials	**L1, L5:** The teachers showed photocopied and enlarged pictures, from the workbook, posters, and other pictures to teach the lesson and make classroom instruction more contextual. **L2, L4:** The teacher asked students to see the picture given in the workbook. He showed word cards that contained words and meanings. **L3:** The teacher showed pictures. The teacher encouraged students to describe the picture. He asked, "What is the girl doing?" (silence). He prompted, "Is she brushing her teeth?" **L6:** Some of the students' books were torn. Two students lacked pencils to write. Ensuring all students are equipped for learning is crucial for learning.
5	Theme connection and Soft-skill integration	**T1-6:** All teachers connected English and Nepali during instruction. T6 also connected "Doteli", a local language. Teachers couldn't talk about soft-skill integration when they were asked after classroom observation. The teachers were teaching all the lessons and exercises as they had to teach all. **T3:** This teacher connected English themes with Maths. He connected numbers to teach days of the week. He also connected numbers (1,2,3, 4 to ask what comes before and after) to teach the prepositions "before" and "after". He asked how many days a week and months are in a year. Then he wrote on the board: 1 month = 30 days 12 months = How many days? (students are silent) 365 days. Some months are 30 days, some months 31 days, and February = 28 days Color coding: The teachers were unaware of the color coding used in the workbook. None of these teachers marked the learning progression chart given at the end of the workbook.
6	Equal learning opportunities were provided	**L1, L6:** Active students dominated the classroom. More priority was given to a few students who could share. Others were silent and participated less in classroom interaction. **L2, L5:** Students were asked to answer voluntarily in the beginning. The teachers randomly asked students to answer questions later. Not all students had the opportunity to respond. **L3, L4:** Students were individually assigned to do the task from the workbook. Many students struggled to complete the exercise and consulted their peers. Many of them copied answers from their friends. This indicates a lack of actual learning. Some students did not know what to do. When the teacher noticed, he clarified what to do. Then, those students started writing. Teachers moved around the class

		to observe how students were doing.
7	Individual differences among students were addressed in the teaching process.	**L1-L6:** Teachers presented the lessons to the whole class. Teachers directed their efforts to raise all children. However, some children seemed engaged, and some others disengaged. The lesson presentation was almost limited to the oral mode with occasional presentation of visual materials in the form of pictures and word cards. The oral presentation is beneficial for students with verbal-linguistic intelligence. However, students with other dominant intelligences are less benefited by this method. **L3:** There were students with developmental delays, although the teacher provided individual support, these students remained isolated. This signifies challenges in fostering inclusion. **L1, L2, L4:** In group settings, students who didn't understand the material remained passive. There are issues in guiding students on how to engage with each other.
8	Engaged students in supplementary activities beyond those provided in the workbook.	**L1-6:** A few students were very smart. They completed the assigned task much earlier than their peers. Consequently, they had to wait for others to learn new concepts or topics. It seems that teachers have not made any plans for fast learners. Such learners engaged in other activities after completing their tasks. Meanwhile, many students struggled with the current lesson's tasks, making addressing content beyond the workbook unrealistic. These students are struggling to grasp the essential points of the lesson.
9	Conducted teaching activities with effective time management	**L1-L6:** All the lessons observed lasted for 45 minutes. Teachers remained active the whole period. TTT (Teacher Talking Time) was more than STT (Student Talking Time). Most of the activities were completed by the teachers. They asked questions themselves and answered them on most occasions. Students remained passive listeners. When students were involved, they were engaged in oral repetition of what the teacher said. Students simply copied the answers in their notebooks from the board. L1 and L5 were extended beyond 45 minutes. This time management issue might have occurred due to a lack of a lesson plan prior to teaching the lesson. Other lessons ended as planned and on time. However, more difficult and essential problems were not addressed, so completing the lesson on schedule cannot be praised.
10	Group work	**L1-6:** Teachers primarily used whole class grouping for instruction with occasional individualized instruction. Students were provided with less opportunity to collaborate and learn from each other in groups and pairs. **L5:** Students were divided into small groups. However, a significant amount of time was allocated for whole group activities. During small group work, students lacked the skills to learn collaboratively, resulting in weaker students simply copying answers. Only a few students remained active during group work and dominated the group activities. This rendered the extended group activity time ineffective.
11	Assessed students' learning achievement using appropriate	**L1-6:** Teachers frequently asked oral questions to assess the students before, during, and after the lesson was taught. They frequently observed students' notebooks to ensure that students had copied from the board correctly. Teachers didn't mark or use the 'learning progression chart' given at the end of the workbook to record how much content students have mastered. Assessment methods were almost uniform across all lessons. Teachers checked the notebooks

	tools	of students who completed tasks, which is commendable for personal assessment. During oral questioning and assessment, students were directly asked the questions without providing 'wait- time' to think and answer the questions. Teachers also assessed students based on their written exercises during classroom activities. The writing activity was almost limited to what was given in the student's workbook. **L3:** The teacher asked students to take turns reading the poem as a song.
12	Conducted Remedial teaching	**L1-6:** When checking answers, teachers directly corrected mistakes either orally or in written form. Teachers repeated the explanation many times to make the students understand and be able to do the task. However, a few students were still not able to complete the exercise even at the end of the lesson. The teachers did not keep any record of student performance. It was only in their head. The documentation part was missing.
13	Reviewed and provided feedback on student responses	**L1-6**: A common issue across all lessons was the lack of classroom-wide reviews of student mistakes. Each learner is unique and learns in a wide variety of ways. Providing personalized feedback is crucial for growing their learning trajectories. Group work and pair work could be utilized to offer peer correction and feedback. **L4:** Students made a lot of spelling mistakes in writing. The teacher reached individual benches, observed students' writing, and provided oral and written feedback. L5: The teacher complemented students' correct responses orally.
14	Medium of instruction	**L1, L4:** English lesson was taught in Nepali orally. However, the written form on the whiteboard was in English. **L3, L5, L6:** Both English and Nepali were mixed almost equally to explain the lesson. Local language (Doteli) was used by T6 as a technique to engage and clarify the concept to the students. **L2**: Most of the lesson was presented in English with occasional word translation in Nepali as a technique to clarify if students don't understand in English as a last option to make them understand the concept.
15	Lesson closure	**L1-L6:** Teachers wrapped up the lesson recapitulating what was taught. Teachers supplied the summary of the lesson rather than asking students to answer. While this serves as a summary for now, it was insufficient. A proper conclusion should include a review of challenging points and confirmation of newly learned content. The lessons observed could not provide sufficient evidence of the fulfillment of lesson goals. All these lessons ended with assigning some homework to students.

(2) Issues

Teacher Preparedness

There is a significant gap in teacher training regarding integrated curriculum implementation. During informal discussions, participant teachers in the study reported that they were not sufficiently prepared to respond to the needs of students in the classroom. Varying levels of students' proficiency have significantly added complexity to classroom instruction. Based on informal conversation and classroom observation with the teachers, it was revealed that teachers neither got the opportunity to learn about integrated curriculum during pre-service teacher preparation nor sufficiently during their in-service teacher training. Teachers were in a state of confusion about how to handle an integrated curriculum. Participant teachers expected sufficient training to translate curricular goals into classroom practice.

Responsiveness to Diversity

Classrooms are diverse in terms of ethnicity, home language, and learning levels, which complicates English language instruction. Many students are more comfortable with their mother tongues. Consequently, teachers frequently shift to using Nepali to explain concepts, which diminishes students' exposure to English and hinders their language learning. Students in the observed lessons often exhibited passive learning behaviors, showing reluctance to engage in interactive activities such as discussions or writing exercises. This passivity might have resulted from a lack of confidence in their English abilities and a preference for Nepali medium instruction. Moreover, a diverse linguistic background complicates the teaching process. However, teachers use Nepali and English, which dominate classroom instruction. In lesson 6, the teacher sometimes explained in the local language (Doteli) to make the concept clear to the students. In all the lessons observed, the teachers were struggling to meet students' individual needs.

Motivation, Engagement, and Participation

The concepts of motivation, engagement, and student participation in the observed English language teaching lessons are complex. Motivation plays a crucial role in language learning. Some students in the observed classrooms were found to be demotivated and disengaged in the lesson. Moreover, none of the students were equally participating and engaging in the lesson. Classroom instructional delivery was mostly one-way traffic from the teachers' side, as a 'sage on the stage'. Teachers seemed more actively engaged, rather than making students participate in the activities and letting them become engaged. Many teachers rely heavily on the Nepali language during English lessons to ensure comprehension. Over-reliance on the native language can hinder the development of English proficiency among students.

Sufficiency of Resources

During the field visit, it was revealed that schools lacked adequate resources. Only limited teaching materials and resources were available for instruction. Classrooms often lacked supportive teaching and learning materials for creating a better learning environment and engaging learners. Insufficient resources certainly limit the quality of education. Depending only on workbooks may not be enough to engage students. The use of audiovisual aids can enhance the language learning of diverse students.

Assessment

Regular formative assessment is necessary to promote students' progress. However, observed lessons revealed that its implementation has faced significant challenges. Inconsistent assessment practices among teachers might be the hangover effect of traditional assessment practice. A mismatch and a notable disconnect between intended curriculum goals and the actual assessment practices were observed. Schools are still found to have practised the system of terminal exams and final exams instead of using regular assessment as a part of instruction. Their focus was much on assessment of learning with limited focus on assessment for learning and assessment as learning. In most of the observed schools, an assessment portfolio was maintained but not on a regular basis and as intended by the

curriculum. The total marks were broken down to fit the portfolio sections to show during supervision. Records were kept only before or after the terminal/final exams, but not on a regular basis for improving learning, assessment and remedial teaching.

Translation

Heavy translation from English to Nepali dominated most of the classroom instructional time in some of the lessons observed. Particularly in L1 and L5, the teachers relied significantly on translating into Nepali to explain English vocabulary, grammar, or concepts. Instead of using English to teach English, the teachers frequently translated back and forth between Nepali and English. Students do not get enough exposure to the target language this way. They become reliant on translation. As a result, it develops dependence and encourages students to become passive learners, expecting the teacher to translate everything for them. This hinders students' independent language learning strategies.

Anxiety and Hesitation

During classroom observation, one of the pertinent issues was student silence. In most of the classrooms observed, the majority of the students hesitated to speak. They may be afraid of making mistakes, being judged, or ridiculed for grammatical or pronunciation issues. Hesitation may have resulted from anxiety. When students are anxious, they may hesitate to participate in classroom activities, ask questions, or engage in conversations. Therefore, to lower their affective filter, activities that promote interaction and communication in pairs or small groups can develop their confidence.

(3) Key observations

The issues observed in the six lessons and their solutions are summarized in Table 2-9. To enhance clarity, titles have been added to each problem.

Table 2-9 Key observations

	Title	Key Observation	Possible solutions
1	Grouping and seating arrangement	Students were primarily taught in a whole class grouping format in the observed classrooms. Although this grouping format is necessary to give instructions and practice pronunciation together, poem or song recitation, this cannot meet students' individual needs because their needs vary. Students sat on stationary benches, making it difficult to collaborate and work in a group.	Flexible grouping can help teachers to respond to the needs of students. Along with the whole class grouping, students can benefit from small groups, pairs, and one-on-one instruction. It should be noted that grouping is insufficient to meet students' needs. Working in small groups allows students to collaborate, explore, participate, and get engaged in flexible grouping rather than the traditional whole-group instructional format for better language learning. Small group instruction can encourage quiet students to have meaningful interactions. Instead of stationary benches and fixed seating

			arrangements, flexible and individualized seating arrangements can better promote peer collaboration and learning as it allows the reorganization of seating based on the needs of the lesson.
2	Medium of instruction	In L1 and L4, overuse of translation was noticed. Almost everything in English was presented in Nepali. This provided limited exposure to English. L3, L5, and L6 also significantly limited exposure to English was provided. L3, L5, L6. When asked why, the teachers responded that it was for comprehension.	Translation as a technique at the word level for teaching complex vocabulary may be necessary for beginners. However, translation as a method to teach every aspect of the lesson is not appropriate. Overuse of translation into the mother tongue needs to be minimized. Instead, alternative multisensory methods can be more appropriate for engaging and appealing to beginners.
3	Responding to the needs of diverse students	Recognition of the differences among students is crucial in the classroom. Each learner is unique in himself/herself with varying abilities, interests, prior learning experiences, motivation, and learning profile. The unique identities of each learner in the classroom create a wide variety of students' needs. In the observed classes, teachers were struggling to respond to the needs of students.	Diversity is an opportunity. Differences are natural phenomena in everyday life. So is the case in the classroom context. Therefore, lessons and classroom activities need to be designed to suit the diverse needs of the students at their instructional level so that students don't get distracted from the lesson. Every learner can learn. Teachers need to adapt instruction to suit the needs of students rather than students adapting themselves to the teacher's style of instruction for better learning to take place
4	Clarity of instruction for task completion	Classroom observation revealed that some students seemed confused about what to do when the teachers assigned them to complete the tasks. Students may not lack understanding, but they simply could not figure out what they were asked to do. Without clear instructions, they cannot complete tasks on their own. As a result, some students remained restless or started copying their friends.	Before asking students to complete the task, teachers need to ensure that students understand the procedure for completing the task. Teachers are required to give clear instructions before assigning the tasks to the students to ensure they understand the tasks they are assigned.
5	Time management	Teachers remained active in all the lessons observed, and students were passive listeners.	Instead of teachers taking much time, maximizing student talking time and minimizing teacher talking time is advisable.

		Lessons were presented as 'sage on the stage'	
6	Subject teaching	All the schools in the study had made provision for subject-specific teaching by different teachers.	It is better to assign grade teachers for grades 1-3 who teach all the subjects so that the teacher can learn individual needs better and adapt instruction to integrate curriculum connecting all subjects where appropriate.
7	Curriculum Integration	It has been nearly 5 years since the implementation of the integrated curriculum. However, the intention of an integrated curriculum was not reflected in classroom practice.	It is necessary to ensure that all teachers get an effective model of integrating curriculum in the classroom during TPD. Regular support and monitoring need to be provided to the teachers.

2-1-4 Hamro Serofero

(1) Aggregated results

All the information included in this report is collected primarily through school and lesson observation and focus group discussion with stakeholders. The selection criteria for the schools were based on regional representation: the Terai, Hilly, and Mountainous areas. Two schools were selected from different local governments within one district in each of the three regions. Due to the limited time available for the survey, schools deemed standard within the regions were selected from easily accessible local governments (LGs). Six lessons were observed during the study. five schools were secondary, and one was a basic school (L3).

The areas and schools observed in the survey are presented in the following table.

Table 2-10 Name of school, class, and location of the school for lesson observation

S. N	Area	District	LG Municipality	School	Grade	Lesson	Number of students	Date of Survey
L1	Hilly	Syangja	Walling	Upallo Pekhu S. S	G2	Public Property	10	Dec. 12, 2025
L2			Galyang	Janaki Secondary	G1	Parts of Plant	18	Dec. 13, 2025
L3	Himalayan	Sankhuwasabha	Khandbari	Himalaya Basic	G2	Properties of Things	09	Dec. 26, 2025
L4			Chainpur	Saraswoti Secondary	G3	Our Security	11	Dec. 27, 2025
L5	Terai	Kanchanpur	Bhimdatta	Maheswor Secondary	G3	Creature & Environment	29	Jan. 09, 2025
L6			Dodhara Chadani	Sharada Saraswoti S.S.	G1	Our Family	07	Jan. 10, 2025

Based on the Lesson Observation Tools developed by CDC, the common features observed across the six lessons are summarized below in Table 2-11.

Table 2-11 Outcomes of Lesson Observation

SN.	Indicators	Description
1	The class begins with interesting and relevant activities	**L1** and **L4** lessons began with lyrics and related drawing pictures in interesting ways. Students were motivated to study. **L2** and **L3** classes started with reviewing previous lessons without motivation or any attention seeking activities. **L5** and **L6** classes were started immediately without the attention of students for study.
2	The teaching activities in the classroom are interactive and participatory	**L1** and **L4** classes were run in an interactive way, and most of the students actively participated in interaction. They asked their teacher some questions, too. **L2** and **L3**: In the beginning, the teacher asked the students about the lesson to study as he was confused or not sure about the lesson that he was going to teach. Then, there was interaction only by asking questions. **L5** and **L6:** There was no interaction between teacher and students. Students were only passive listeners and talked with their friends.
3	Utilized purposeful and contextually relevant teaching materials	**L1**: No materials were used; though the teacher tried to show them on a smart TV, the attempt was worthless. Then, he was able to visualize a virtual class on mobile at the end of class. **L2**: No teaching materials were used. Teaching activities were fully dependent on the workbook. **L3** Teachers showed the experiment of soluble and non-soluble goods using the necessary utensils, which were appropriate and contextually relevant teaching materials. **L4:** Appropriate pictures were used for security. Pictures of roads and playing on the side of the road and playing in the classroom. **L5** and **L6**: Fully depend on the workbook. No additional materials were used. Teachers were less active than students. They used traditional methods of teaching as they were the source of knowledge.
4	Equal learning opportunity is provided	**L1** and **L5**: All students were not given equal opportunities for learning; only selected students were prioritized to share their opinions. **L2** and **L3:** While ensuring the time for equal learning opportunities, some students copied the answers from their friends. **L4:** Although individual learning opportunities were provided to the students, some students did not concentrate on the class. **L6:** No opportunity was provided for the students.
5	Addressing students' individual differences during the teaching process	**L1** and **L2**: Some students didn't understand the teacher's instructions and remained passive and isolated. Which became a challenge for inclusive. **L3** and **L4:** While students were doing workbook exercises, a few students got confused, and at that time, the teacher supported them individually, which was appreciative. **L5:** As the teacher used a full lecture method in teaching, all students were not observed to identify individual differences. **L6:** No effort was made to address the individual differences among the students during the teaching-learning process.
6	Students are involved in additional activities beyond those given in the workbook	**L1, L5** and **L6:** Teachers gave the instructions to do workbook exercises only orally. As the teacher focused on workbook exercises, most students had no time to think about other activities. **L2:** Except for the workbook exercise, students questioned some additional activities orally. (For example, telling the plants with their

		parts found near their kitchen yard.) **L3:** The teacher created suitable situations to involve students in additional activities orally. Students were asked to tell soluble and non-soluble things beyond the examples of workbooks such as soil, wood, cooking oil etc., which was praiseworthy. **L4:** The teacher engaged students orally to tell them how to be safe in swimming, collecting firewood, and cutting grass and fodder for domestic animals in a good way.
7	Proper management of time in conducting teaching and learning activities	**L1, L3, L5, and L6:** Teachers didn't properly manage time conducting classroom activities. They were only assigned workbook problems. They repeated the text and the same subject matter **L4:** Appropriate time was allocated to deliver the lessons. Demonstration of pictures, elaborating the lesson, student activities, evaluation, etc. were promptly managed in time. Except **for L5 in all schools, allocated time for 'Hamro Serofero' was not given priority as the** curriculum outlined.
8	Strategy of integration with multi-disciplinary subjects	**L1, L3, and L4:** The theme of these lessons was integration with multidisciplinary subjects, Nepali and English, but the teacher didn't make a single effort for integration. **L2** and **L5:** The theme of L2 and L5, living creatures of the surroundings and living things of our surroundings, respectively, were single disciplinary, so those lessons were not integrated. **L6:** The theme of the lesson (our family) was multidisciplinary content with Nepali, English, and Mathematics subjects, but the teacher didn't attempt integration with any other subjects.
9	Assessed students' learning achievement using appropriate tools	**L1 - L6:** All the teachers used the same assessment method in all lessons. There was uniformity in evaluating students by asking questions orally and checking the workbook exercise. The CAS evaluation tool was not taken out. Teachers mainly focused on workbook exercises, so other means of evaluating tools must be used immediately.
10	Conducted remedial teaching	**L1, L3** and **L4:** The teacher tested the students both orally and written. Then, teachers explained corrections in case of wrong ones and motivated them to repeat the right answer in interesting ways. **L2, L5** and **L6:** No remedial teaching was conducted. The remedial teaching approach must be implemented immediately so that students can correct the mistakes themselves.
11	Reviewed and provided feedback on student responses	**L1** and **L2:** While doing class work and exercises, teachers immediately corrected the mistakes**.** No time was provided for review and feedback. **L3** and **L4:** Teachers immediately corrected the students' mistakes while doing exercises with appropriate feedback**.** **L5** and **L6:** A common issue across these two lessons is the lack of classroom reviews of students' mistakes. None of the lessons were reviewed and provided feedback.
12	Wrapped up the lesson effectively and appropriately	**L1, L3, and L4:** Teachers wrapped up lessons by summarizing the most important key points from the lesson. This helped to reinforce learning and ensured the learning outcomes were clear. **L2, L5** and **L6:** The classes were not properly wrapped up. A proper conclusion must be included at the end of class. The teachers asked them to do exercises from the workbook and gave formal information about the next lesson while wrapping up the class.

(2) Issues

Ineffective Classroom Structure

The classroom structure in three lessons observed was traditional row arrangements, and did not allow their students to receive equal attention from the teacher. Some students received more attention while others got overshadowed. This imbalance can hinder learning opportunities and create disparities in student engagement and academic progress. A class should be well-structured to facilitate equal participation, ensuring that every student benefits from the teacher's support and instruction.

Lack of Consistent Student Engagement Across Lessons

There was a significant variation in how lessons were initiated and conducted. While two lessons used creative activities to capture attention, others lacked such approaches, leading to passive and disengaged learners, reviewing previous lessons, teaching using lyrics and showing drawing charts. These creative approaches engaged the students and motivated them to listen actively. However, the other lessons lacked interactive and stimulating activities, which caused reduced interest on most of the students and, created opportunities for distractions. When lessons fail to engage students actively through projects, discussions, role-playing and real-world applications of lesson contents, they tend to be involved in side-talking or irrelevant activities, such as playing with pencils, eating tiffin, doodling, etc. Maintaining students' focus and enthusiasm throughout all lessons becomes challenging without a consistently engaging teaching strategy, ultimately affecting their learning experience and overall academic performance.

Insufficient Attention to Individual Learning Differences

It was revealed that teachers often failed to address the diverse learning needs of their students. Those struggling to understand instructions or keep up with the class were frequently overlooked, leaving them isolated and disengaged. Inclusive practices, such as personalized support or differentiated instruction, were rarely implemented, creating a sense of individualism and detachment among learners. Additionally, the large number of students in a class of Terai region school made it challenging for teachers to provide individual attention. This lack of personalized engagement fosters a sense of individualism, where students feel detached from the learning process rather than being part of a supportive academic environment. While peer support could effectively bridge this gap, it was not systematically encouraged, leaving students struggling without the necessary guidance to improve.

Overreliance on workbooks and Limited Additional Activities

Based on the lesson observations, it was found that there was a heavy reliance on workbook exercises, with minimal emphasis on activities beyond the curriculum, failing to incorporate modern tools and technology that enhance conceptual understanding. For instance, the use of videos and smart TVs where the concept is shown in diverse formats could effectively clarify the complex concepts; role-playing activities could help students better understand real-life situations, such as those covered in Hamro Serofero. In other cases where materials were used, they were not always effectively integrated into the learning process. It is essential to integrate digital resources, hands-on activities, and experiential learning techniques into teaching learning process as per the intent of curriculum, not just for sake of

use, to enhance student engagement and comprehension

Problems in Time Management During Lessons

According to the curriculum, the allocated credit hours per week for 'Hamro Serofero' is eight per week, but most of the schools we visited allocated hardly five hours per week. The absence of a well-structured lesson plan leads to inconsistent time distribution across different teaching and learning activities. Without proper planning, both simple and challenging topics are often given the same amount of time, causing students to lose interest in easier lessons while feeling overwhelmed and confused when tackling more complex concepts due to insufficient time. The observed lessons focused excessively on workbook content, neglecting time for interactive or practical activities. This results in rushed or incomplete learning experiences for students. Furthermore, classrooms were not well-managed, with students disengaging and talking among themselves during lessons.

Lack of Multidisciplinary Integration

Despite the integrated curriculum framework, most of the observed lessons failed to connect themes with other subjects effectively. A contributing factor to this issue may be that not every teacher is competent or confident enough to integrate subjects beyond their expertise. Teachers primarily focused on their respective subjects, avoiding interdisciplinary connections. The real cause of this issue needs further research. Even though a few teachers recognized the importance of subject integration, they often struggled to apply it

Limited Assessment and Feedback Mechanisms

Assessments in the observed class primarily focused on workbook exercises and oral questioning, with little variety in assessment tools. Feedback, when provided, was often immediate and corrective in nature, but lacked in-depth feedback. The absence of meaningful feedback and review processes limits students' ability to reflect on their performance and improve on their mistakes. A shift towards diverse and simplified assessment tools is necessary to enhance learning outcomes. This also indicates that teachers need a real hands-on training on assessment for learning that goes beyond error correction, guiding students to engage more deeply with their learning process.

Lack of Structured Lesson Closure

Most of the observed lessons ended without a proper wrap-up, as teachers often neglected to summarize key points or to reinforce the main concepts covered. Instead, the focus was placed solely on assigning homework mostly in workbook exercises, without ensuring that all students have grasped the lesson's objectives. In some cases, teachers did not even review the assigned exercises, moving on to the next topic without any discussion. This suggests having a structured lesson plan with proper learning activities, and closure including a summary of key points, a review of understanding, and thoughtful reinforcement of concepts before home/class assignment.

(3) Key observations

The issues observed in the six classroom lessons and their solutions are summarized in Table 2-12. To enhance clarity, titles have been added to address the significant issues.

Table 2-12 Key observations

S.N.	Title	Key Observation	Possible solutions
1	Classroom Structure	L5 class was Crowded, L3 and L4 classes were also arranged traditionally (row) which did not ensure equal attention to all students, leading to disparities in engagement and learning.	It is better to adopt interactive seating arrangements such as U-shaped or circular to promote visibility and interaction. Alternatively, rotating groups periodically ensures equal attention to all students. In cases of overcrowding, the class can be divided into smaller sections or groups, allowing for more focused and effective teaching.
2	Student Engagement in lessons using interactive and Participatory Teaching	Some lessons used engaging activities to maintain focus and enthusiasm while others did not, resulting in distractions such as side talk and irrelevant activities.	It is good to maintain a consistent approach by integrating creative and interactive teaching methods in all lessons, such as debates, role-playing, quizzes, experiments, smartboards, educational apps, etc.
3	Individualism	The diverse learning needs of students were often not addressed. Struggling students often remained unnoticed due to large class sizes and a lack of differentiated instruction in L5.	It is advisable to implement personalized learning strategies such as varied tasks, challenges, and instructional methods to match different learning needs. Teachers can use of different assessment techniques instead of just written tests, e.g. projects, presentations, or creative assignments that allow students to showcase their understanding in a manner that suits their strengths
4	Dependency on Workbooks and Limited Additional Activities	Teaching heavily depended on workbooks with minimal use of digital tools or interactive methods. Even when additional resources were used, they were not effectively integrated.	Teachers may use videos and digital tools to present content in diverse formats, such as virtual classes prepared by CEHRD.
5	Systematic Lesson Plan	The lack of a well-structured lesson plan led to inconsistent time allocation, causing disengagement in easier lessons and confusion in more complex ones. Many lessons focused excessively on workbook content, neglecting time for interactive or practical activities	Teachers need to allocate specific time for each topic based on its complexity and adjust lesson plan based on the pace of the class, ensuring there's room for exploration, discussion, and practice without feeling rushed.
7	Lack of Multidisciplinary Integration	Most of the teachers didn't have any idea how to integrate multidisciplinary subjects. A few teachers knew the concept of integration but struggle to	It is advisable to provide training on multidisciplinary integration, ensuring that every teacher is aware of how to integrate different subjects and lessons specifically.

		integrate subjects beyond their expertise due to inadequate training. Subject connections were often overlooked, limiting real-world application.	
8	Assignment and Feedback Mechanism	Assessments were primarily based on workbook exercises and oral questioning, with little variety in evaluation tools. Feedback, when provided, was often immediate and corrective in nature but lacked depth or structure.	Teachers can incorporate diverse assessment tools beyond workbooks, such as quizzes, written reflections, presentations, and project-based assessments. This allows students to showcase their understanding in different formats. Using feedback as a learning tool can be used in between the lessons in the form of mini quizzes or discussions rather than the final judgment at the end of the lesson.
9	Lack of Structured Lesson Closure	Many lessons ended without reinforcement and summarizing of key points. Teachers often focused solely on assigning homework without reviewing student understanding.	Teachers need to conclude lessons with a summary of key points, a review of learning objectives, and meaningful reinforcement activities. Teachers must ensure the objectives of teaching are obtained.

2-2 Insights from Focus Group Discussions on Understanding and Challenges of IC

2-2-1 Mathematics

The focus group study was conducted in the schools listed in Table 2-13. As IBSE is ongoing and given the difficulty in assembling school personnel for a discussion, individual interviews with teachers and Head teacher were conducted during school visits. The data obtained from these interviews was utilized for analysis.

Table 2-13 School Population of Surveyed School

S.N.	District	School name	Grade	Permanent teacher	Non-permanent teacher	Number of Student
DH1	Dhading	Gayatri Devi Basic School	G1-5	1	5	150
KC1	Khancanpur	Krishna Secandary school	G1-12	10	7	1100
KV1	Kapirbastu	Janata Basic school	G1-8	5	4	400
SK1	Sankhwasabha	Shree Saraswati Secondary school	G1-10	6	12	319
ST1	Saptari	Shree Ram Dayal Secondary school	G1-12	15	8	151

(1) Overall

Implementation System of IC

Teachers coordinate related units across the subjects for the integrated curriculum to make their own lesson plans. However, they have not received prior training in subject-specific knowledge and skills. Under these circumstances, understanding the concepts of units and competencies in the new curriculum

remains challenging.

Assessment

Mathematics learning assessment is conducted through end-of-terminal and end-of-year examinations. These exams are designed at the LG level and have little alignment with the competency-based approach (DH1). Additionally, teachers were unfamiliar with the concept of continuous assessment envisioned in the new curriculum, particularly portfolio-based assessment methods.

Training

There are few formally trained teachers who have completed TPD certification training. Only a portion of teachers have received training at the LG level. Furthermore, it was observed that trained teachers did not share the knowledge gained from the training with their colleagues, posing an additional challenge.

Student Learning

Students have responded positively to the integrated curriculum. Although regional differences were observed in ethnic, caste, and gender composition, interviews did not reveal any clear cases of low academic performance linked to gender or caste.

(2) Issues (Understanding and challenges of IC)

Lesson Planning

Teachers believe that under the IC, they must develop their own teaching materials. In DH1, it was emphasized that, in addition to workbook activities, or in alignment with them, teachers need to create their own materials. ST1 noted that teachers face difficulties in designing activities.

Lesson Implementation

Teachers also recognize the need to utilize workbooks independently during lesson implementation. In KC1, KV1, and SK1, teachers were found to be using CDC workbooks; however, they selected or omitted math items/problems based on their own interpretation and even created additional questions not included in the workbook. When asked about the rationale for their question selection, they were unable to provide clear explanations, indicating a lack of purposeful question design and an insufficient understanding of the intended structure of the workbook.

Furthermore, CDC workbooks categorize maths problems by color, with each color representing a recommended instructional approach, such as individual or pair learning. However, no teachers were aware of this feature.

Meanwhile, in DH1, it was reported that students welcomed the activity-based learning approach of the IC.

Use of Workbooks

Notably, except in DH1, teachers did not possess their own workbooks. As a result, during lessons, they took workbooks from attending students and used them as their own. While teachers claimed to have personal hard copies, it appeared to be a common practice not to use them in lessons.

No schools were found to have Teacher's Guides (TG). (Throughout previous IBSE school visits, cases where teachers effectively used TGs have been rare.) Additionally, no schools were found using CDC's Self-Learning Materials.

Assessment

Teachers in all schools reported challenges with assessment. In DH1, assessments were primarily based on end-of-chapter and end-of-term tests, with student performance rated on a four-level scale. During the focus group discussion, teachers in SK1 expressed uncertainty about the purpose of assessment, while in ST1, they reported difficulties in implementing formative assessment during lessons.

In DH1, one teacher was responsible for coordinating with subject teachers for the integrated curriculum and reported difficulties in assessing competencies. In particular, the teacher was unsure how to implement portfolio assessment.

Training

Few teachers had received TPD certification training. In ST1, some teachers were identified as having completed TPD certification training, while in DH1, teachers had attended short-term training organized at the LG level. Teachers in the other schools had not participated in any training.

Grade Teaching

The implementation of the grade teaching system is shown in Table 2-14. Most schools do not implement it. In DH1, some teachers expressed a preference for subject-specific instruction over the integrated curriculum. However, it appears that these teachers were making this statement not based on a clear understanding and implementation of the integrated curriculum.

Table 2-14 Implementation of grade teaching

S.N.	Grade teaching	Subject teaching	Notes
DH1	No	Yes	
KC1	Partially yes	Yes (Nepali and English)	One teacher can teach all subject in G1-3.
KV1	No	Yes	
SK1	No	Yes	
ST1	No	Yes	

Gender disparities among students

In KC1, female students were noticeably higher than the natural male-to-female ratio in their home

village. School staff explained that many families tend to send boys to private schools. Since private schools are seen as a path to stable jobs, this suggests different expectations for boys and girls in terms of education and careers.

Academic performance, however, did not show clear gender differences from the sample teachers. In DH1, teachers reported that female students performed better than male students.

Language and caste dynamics among students

Schools in different regions had diverse ethnic groups and mother tongues, but no clear link was reported between speaking a non-Nepali language and lower academic performance.

Regarding the language of instruction, KC1 and KV1 showed a preference for CDC English-language workbooks, while DH1, SK1, and ST1 primarily used Nepali-language workbooks.

At ST1, attendance rates were lower among Mithili-speaking students, but their academic performance remained average. In SK1, some reports mentioned that Janajati students struggled with learning Nepali, though there was no clear evidence on their performance in mathematics.

Table 2-15 Composition of Ethnic Language and Caste

S.N.	DH1	KC1	KV1	SK1	ST1
Ethnic language (% of those students)	Nepal	Doteri (40%) Tharu (60%)	Awadi (72%), Tharu(1%)	Non-Nepali (80%)	Mithili (50%)
Caste (% of those students)	Janajati (25%)	Tharu (60%)	Darit(15%) Janajati (51%)	Janajati (Rai, Tamang, Limbu) (N.A.)	Darit (50%)

(3) Key observation results

The implementation status of the integrated curriculum is summarized in Table 2-16, focusing on four key aspects: implementation system, assessment, student learning, and training.

Table 2-16 Key Observation from Focus Group Discussion

Title	Key Observation	Possible Solutions
Implementation system	• Overall, subject-based instruction was implemented instead of a grade-based teaching system. In the integrated curriculum, there was an effort to coordinate lesson plans among subject teachers within the same grade. However, challenges in this coordination were reported. • Most teachers were unable to provide concrete answers to our questions	• Grade teaching is better for effective integration. Moreover, co-planning is another alternative. However, it is necessary to develop capabilities through training to understand and use the curriculum and workbook in real sense.

	about the integrated curriculum. Additionally, they struggled to understand and implement the CDC Maths Workbook due to a lack of training. This indicates that teaching the integrated curriculum is quite challenging.	
Assessment	• Two types of assessment tools are conducted: terminal tests and unit/thematic assessments. Student assessment is conducted using a four-level grading system. Teachers struggle with portfolio assessment. • According to permanent teachers, the new curriculum requires continuous assessment, but they expressed uncertainty about how to implement it. • Permanent teachers stated that they assess competency achievement, but what they consider as "competency" remains unclear.	• Assessment tool simplification can be one solution. Moreover, hands-on skill development and genuine practice by teachers is necessary.
Student's learning	• Regarding gender, there seemed to be differences in expectations for academic achievement and employment between female and male students in some regions. However, no evidence was reported indicating that female students performed worse academically than male students. • There were ethnic and caste differences among students across regions and a diverse range of mother tongues and instructional languages were observed. Although issues with learning the Nepali language were reported, no clear evidence of lower academic performance due to caste was mentioned.	• Diversities in the classroom in terms of gender, caste, ethnicity, students' level, and learning styles should be recognised and they are to be utilised as resources.
Training	• Most teachers do not have permanent positions and have not participated in any teacher training program. • Teachers have expressed a strong need for training to support their professional development.	• Various professional development activities are to be conducted so as to ensure that all teachers are at least well oriented and trained on the concept of integrated curriculum and use of the workbooks.

2-2-2 Nepali Language

(1) Overall

Area: Focus group discussion programs were conducted in representative schools from the Himalayan, Hilly, and Terai regions, as well as from the eastern, central, and western parts of the country, to assess

the implementation status of the integrated curriculum and strengthen it. The details of these schools are provided in the table below.

Table 2-17 Focus Group Meeting School Names

S.N.	Area	District	LG	School	Date of survey
S1	Hilly	Syangja	Waling	Upallo Pekhu Secondary	Dec. 12, 2024
S2	Hilly	Syangja	Galyang	Janaki Secondary	Dec. 13, 2024
S3	Himalayan	Sankhuwasabha	Khandbari	Himalaya Basic School	Dec, 26, 2024
S4	Himalayan	Sankhuwasabha	Chaipur	Saraswati Secondary	Dec, 27, 2024
S5	Tarai	Kanchanpur	Bhimdatta	Maheswor Secondary	Jan. 9, 2025
S6	Tarai	Kanchanpur	Dhodhara Chandani	Sharada Saraswati Secondary	Jan. 10, 2025

Participants: The participants of the program included school Head teacher, subject teachers, representatives of the School Management Committee, Parent-teacher representatives, Education Development and Coordination Unit chiefs, Local Education Officers, local government representatives, local curriculum experts, students, representatives from the Curriculum Development Centre, representatives from the Centre for Education and Human Resource Development, JICA IBSE district representatives, JICA IBSE central officials, and subject experts.

Overview of the Finding: During the discussions, it was observed that all stakeholders have a serious interest and concern regarding school education. To enhance it, local governments are making efforts to improve physical infrastructure and ensure qualitative development in school education. Various types of teacher training programs are being conducted by agencies such as the Education Development and Coordination Unit, Education Training Centers, and local education offices to enhance the professional capacity of teachers.

Regarding the integrated curriculum for Grades 1–3, it was observed that, apart from parents, all other stakeholders had some level of understanding about it and were positive about its successful implementation. Training programs for the concerned teachers are being conducted gradually. There is also a practice of discussing the training content with other teachers in the school.

The integrated curriculum is considered timely and practical, with no unnecessary academic burden on students. It was widely agreed that it can be successfully implemented through effective classroom teaching. The stakeholders expressed a positive outlook, believing that making both teachers and parents accountable can ensure its successful implementation.

(2) Issues (Understanding and challenges of IC)

The integrated curriculum for Grades 1–3 in Nepal has encountered significant challenges during its implementation. Despite being in place for five years, there are clear gaps in understanding, execution, and stakeholder engagement. The following are the critical areas identified:

Unclear Understanding of the Integrated Curriculum

It was observed that stakeholders, including teachers and parents, lack a clear understanding of the curriculum's provisions, leading to poor implementation. There are still some misconceptions about the assessment system that have caused confusion, with many perceiving it as an "automatic promotion system."

Quality and Accessibility of Nepali Workbooks and Teacher's Guide

The large size and poor quality of workbooks negatively impact usability. Missing pages further disrupt learning. Teachers have not fully utilized the teacher's guide, with many only accessing digital versions sporadically and failing to incorporate it into lesson planning.

Subject-Wise Time Management

Additional subjects, such as English-medium science, are introduced under parental pressure, reducing time for prescribed subjects in the curriculum. Teachers struggle to deliver curriculum content and exercises in real intent due to limited understanding, time pressure and overcrowded classrooms.

Preference for the English Language

Schools prioritize English to compete with private institutions, often neglecting Nepali language education. This shift has led to additional teaching loads and a deviation from the curriculum's intent.

Lack of Trust in Public Schools

Public schools primarily serve children from disadvantaged communities, while wealthier families enroll their children in private institutions. This lack of trust further marginalizes public schools and reduces their resources and standing in the community.

Lack of Parental Awareness

Parents are unaware of the integrated curriculum and its internal assessment system, leading to low engagement and misplaced expectations for formal exams. No institutional efforts have been made to educate parents about the curriculum, hindering their ability to support its implementation effectively.

(3) Key observation

The implementation status of the integrated curriculum is summarized in Table 2-16, focusing on four key aspects: implementation system, assessment, student learning, training and monitoring, and classroom management.

Table 2-18 Key Observation from Focus Group Discussion

S.N.	Title	Key Observation	Possible Solutions
1	**Implementation system**	• Although different teachers taught in a subject-specific manner, they discussed and consulted with each other about the curriculum. • During classroom teaching, lessons with common themes were integrated with other subjects as well. • Since not all teachers were proficient in all subjects and lacked necessary training, implementing grade teaching posed challenges. • Newly joined teachers in the middle of the academic session were unaware of the integrated curriculum and taught based on their own understanding. • Even though teachers were aware of the teacher's guide, its proper utilization was not ensured. • Weak students were taught in separate classes (e.g. S5), but according to teachers, time management issues created challenges. • Bringing absent students up to date with lessons they missed from the previous day and aligning them with regular classes like other students was challenging. It was clearly found that teachers are not fully aware about the main spirit of the new curriculum, especially how to integrate the different themes while teaching.	• The teachers need to develop their proficiency in all subject areas of Grade 1-3 curriculum. It should be done by teachers themselves through self study or through trainings. Grade teaching is recommended, otherwise, they should co-plan the lessons. Teachers should have sound hands-on skills on using the curriculum, workbook and teacher's guide. • More support on School-level TPD activities is necessary for the effective implementation of the revised curriculum at the school level. This indicates that additional arrangements are required to implement the programs envisioned by the integrated curriculum effectively. • Remedial teaching is the main essence of integrated curriculum. Teachers should apply different remedial teaching activities for ensuring the catch up and foundational learning
2	**Assessment**	• According to permanent teachers, the new curriculum requires continuous assessment, but they expressed uncertainty about how to implement it. • • Parents were not oriented about the internal assessment system. As a result, they do not trust that evaluation can happen without formal exams. Therefore, schools are compelled to	• Assessment is an integral part of curriculum implementation. Therefore, teachers should be made proficient in applying assessment tools and process during learning facilitation process. In Grade 1-3 case, assessment is mainly used as a tool to assessment for learning. Proper guidance should be given for teachers through training and

		implement formative assessment as well as summative examinations. • Some schools did not have proper record-keeping books. Although some schools claimed to maintain student records, when the books were reviewed, their proper use was not evident. No teacher was found to be aware of the learning steps provided in the workbooks, nor was there any tendency among them to inquire about such new concepts. • According to teachers who had received training and practiced integrated assessment methods to some extent, the evaluation system of the integrated curriculum is effective, but its application is challenging due to classroom and time management constraints in the current context. • There are numerous lessons and exercises for grades 1–3, and a single teacher often has to teach up to six classes in one day. Additionally, basic-level teachers are required to teach higher classes as well. Due to a large number of students and a lack of physical infrastructure, despite the effectiveness of the integrated curriculum's evaluation system, its implementation remains challenging.	professional development activities. • Additional works on simplifying the assessment portfolios may be required. Schools have to manage the portfolios forms for all students theme wise. This may require additional funds.
3	**Student's learning**	• There are significant issues with regular attendance. • Even though students leave home for school, many are found playing on the way and not attending classes, indicating a lack of seriousness from both parents and schools regarding this situation. • In some schools, children of parents who migrate to India in search of work also accompany them, resulting in their attendance being limited to only a short period at school.	• Students' foundational learning has to be ensured through remedial teaching. Likewise, some practical and need-based measures are deemed to be necessary so as to reduce class absenteeism and dropouts.

		• The attendance rate of Dalit students is high, and their academic performance is above the school average.	
4	**Training And monitoring**	• Before implementing the curriculum, customized training was provided to representative teachers through the local education office. However, due to the COVID-19 pandemic, it could not be conducted effectively or on a wide scale. • Training on the integrated curriculum was given to only a few teachers in schools. In some schools, the trained teachers were transferred, leaving no trained teachers behind. • Although it was mentioned that Head teacher recommended teachers for training and encouraged post-training discussions at school, in practice, teachers themselves admitted that the training was not properly utilized. • Authorities acknowledged that it was not possible to provide training to all teachers. • No monitoring activities were conducted post-training, and local education officials mentioned a lack of staff for regular monitoring. • There was no established practice of school administrations supervising how the training was being implemented by the trained teachers. • Teachers expressed enthusiasm for training and stated that with proper training, they would be ready to implement the integrated curriculum effectively.	• Training and on-site technical support are necessary for the effective implementation. School-based monitoring and supervision can be one of the alternatives.
5	**Classroom Managemen t**	• During discussions, it was found that class-wise seating management was being used in all schools. • Among them, the teacher at School S5 mentioned attempting to use multilevel and multi-grade learning methods but stated that due to a lack of time, these	• Various classroom management strategies are to be applied in accordance with number of teachers available and students in the class. Grade teaching, multi-grade teaching, multi-grade, multi-level teaching are

		methods could not be applied effectively.	some of them. Apart from these, the classroom can be modified so as to ease students' group works, pair works and other cooperative learning strategies.

2-2-3 English

(1) Overall

The Focus Group Discussion (FGD) was conducted in six schools in three districts. Located about a 30-minute to 1-hour drive from the district center, the schools are situated in a relatively economically advantaged area within the district. However, families with higher economic status tend to send their children to private schools, meaning that students generally come from relatively poor households.

The participants for the FGD included CDC representatives, CEHRD representatives, Education Development and Coordination Unit (EDCU) chief, Local Education Officers, Local Government representatives, Head Teachers, subject teachers, school management committee members, teacher-parent organization representatives, local curriculum experts, JICA IBSE central officials, JICA IBSE district coordinators, and subject experts. Table 2-19 shows the location and date of FGM meetings in six schools.

Table 2-19 Location of Schools for Focus Group Discussion

Schools	Area	District	LG	Date of Survey
S1	Hilly	Syangja	Waling	Dec. 12, 2024
S2	Hilly	Syangja	Galyang	Dec. 13, 2024
S3	Himalayan	Sankhuwasabha	Khandbari	Dec. 26, 2024
S4	Himalayan	Sankhuwasabha	Chainpur	Dec. 27, 2024
S5	Tarai	Kanchanpur	Bhimdatta	Jan. 9, 2024
S6	Tarai	Kanchanpur	Dodhara Chandani	Jan. 10, 2024

S1=School one

(2) Issues (Understanding and challenges of IC)

Implementation System of IC

Subject-specific teachers are assigned to teach. They informally collaborate to adjust related units and develop instructional plans for the integrated curriculum. However, a formal mechanism for collaboration has not been developed and exercised in the schools that were observed. These teachers have not received training in subject-specific pedagogy and skills prior to implementing the integrated curriculum. Most English teachers in the early grades (grades 1-3) lack training in integrated curriculum methods. This makes it difficult to understand and implement the new curriculum's competencies and themes.

Assessment

Traditional forms of assessment with terminal examinations and annual examination systems are still the dominant forms of evaluation in schools. Therefore, assessment for English is conducted through end-of-term and end-of-theme exams. Terminal exams are prepared at school and local government level and do not align with the integrated curriculum framework. Additionally, teachers lack sufficient knowledge of specific methods for continuous assessment as envisioned by the new curriculum. In this context, conducting evaluations in line with the integrated curriculum is challenging. As a part of the assessment system, keeping records of students' portfolios on a regular basis is important. Teachers raised concerns over keeping records of student assessment data regularly. They said that they have a heavy workload. They cannot manage time to record all the details due to limited time.

Training

Based on the FGD and personal communication with English teachers, it was revealed that despite the introduction of the integrated curriculum, there are significant gaps in teacher training. During FGD, many educators reported receiving little or no training before implementing the new curriculum. This is challenging when effectively delivering integrated content. Not all English subject teachers have had the opportunity to complete TPD (Teacher Professional Development). Moreover, it was revealed during the field study that only one or two teachers in the study schools have received integrated curriculum training. Some of the teachers who received such training have already been transferred to other schools. Most of the teachers in the schools are still waiting for the training. This indicates an urgent need to provide some form of training for all primary-level teachers. Teachers require ongoing professional development support to effectively implement an integrated curriculum. During FGD, the teachers appealed for training and opportunities for exposure to translating the integrated curriculum in classroom instruction.

Parents Expectation

Parents' preference for the English medium is widespread. Many parents believe English medium instruction is a symbol of quality. The number of students in community schools in the hilly areas is decreasing due to migration to city areas. Schools are capitalizing on English medium instruction to attract students. The preference for English medium among parents in Nepal has been significantly influenced by globalization, perceived economic benefits, and the status associated with English proficiency. Parents view English as a crucial skill for better job prospects and higher education opportunities, both nationally and internationally. The societal perception of English as a prestigious language has also contributed to its popularity among parents. Stakeholders reported that many parents prioritize enrolling their children in English medium schools, associating English education with higher social status and better life prospects. Therefore, community schools are gradually shifting the medium of instruction to English to attract students. The success of private schools offering English medium instruction has prompted community schools to adopt similar approaches to attract students. These schools are gradually adopting English medium instruction to fulfill parents' expectations as well as to increase student enrollment. Due to this preference and following the tradition of private schools,

additional subjects such as Science and Computer have been added, causing challenges in implementing an integrated curriculum.

Despite a strong preference for English medium instruction among parents, several challenges arise. The field study revealed that many community schools faced difficulties in effectively implementing English medium instruction due to a lack of trained teachers and resources. Teachers often felt compelled to teach in English despite not being proficient themselves. This can hinder the quality of education. Moreover, the shift towards English medium instruction raises concerns about the preservation of local languages and cultural identities. Prioritizing English may undermine the value of linguistic diversity.

Unclear Understanding of Integrated Curriculum

Integrated curriculum, introduced in 2020/21 for nationwide implementation, was piloted in 103 schools of 18 districts (Curriculum Development Center, 2019). Teachers are essential for delivering the intent of the curriculum effectively in the classrooms. The focus group discussion with stakeholders revealed that they lacked a clear understanding of the core concepts and methodologies associated with an integrated curriculum.

Thematic Connection: A Challenging Issue

All the teachers who participated claimed that the present integrated curriculum is better than the earlier one in terms of child psychology and learning. However, many participants could not clearly explain the thematic connections between the subjects. These teachers find thematic connection a challenging one. They are not provided with models of how to make connections in the classrooms with disciplinary, multidisciplinary, and interdisciplinary themes. All these teachers expected training on integrated curriculum.

Soft Skill Integration and Color Coding

The curriculum aims to integrate various subject areas with specific soft skills. It incorporates a total of 29 skills, categorized under five significant areas. They include thinking, intrapersonal, interpersonal, information communication, multiliteracy, and citizenship skills (Curriculum Development Center, 2019). These skills are embedded in all subjects' curriculum. In this sense, soft-skill integration is transdisciplinary. However, the majority of the participants were unaware of these skills. During FGD, teachers reported that they were not cognizant of how to integrate soft skills. Moreover, they also did not know the intent of the color coding used in the workbook. The teachers are still in confusion what to do. They expected orientation on implementing the intent of the curriculum. They said that the integrated curriculum is new for them. They did not learn in university courses. Most of them have not received in-service training. This reveals the situation regarding the implementation of the new curriculum. However, the teachers said that they are trying their best in their classroom based on teachers' guides, online resources, and peer collaboration.

(3) Key observation

The implementation status of the integrated curriculum is summarized in Table 2-20, focusing on nine key aspects: implementation system, assessment and portfolio, absenteeism, training, parents' involvement, additional subject instruction and English medium instruction, monitoring and supervision, resources and materials, and use of prescribed credit hours.

Table 2-20 Key observation from Focus Group Discussion

Title	Observation	Possible Solutions
Implementation system	Subject-specific pedagogy is employed. A systematic approach to curriculum integration, particularly regarding thematic unity, is largely absent. Stakeholders lack consensus regarding the conceptual understanding and implementation of integrated curriculum principles and practice.	Assigning grade teachers rather than subject-specific teachers can facilitate the implementation of an integrated curriculum better, making it easier to make thematic connections during instruction. Moreover, the development of integrated plans on common themes across subjects can offer potential benefits. Additionally, effective professional development and ongoing support for educators are essential prerequisites.
Assessment and Portfolio	A predominant emphasis is placed on the assessment of learning with less attention on assessment for learning and self-assessment practices. Moreover, assessment practices primarily consist of traditional forms of terminal and annual examinations. Although integrated curriculum frameworks necessitate a regular formative assessment, teachers have expressed concerns regarding implementation. They have shown uncertainty, perceived workload, and conceptual confusion. Traditional assessment modalities and reporting practices are persistent. Parental expectations also favor these established methods. The learning progression charts provided within the workbook are underutilized by teachers. Due to perceived workload and the complexities associated with longitudinal assessment data management daily, teachers do not consistently maintain student portfolios documenting classroom performance.	Effective and impactful professional development focused on ongoing assessment strategies and portfolio management techniques is critical. Such training should address the complexities of formative, summative, and self-assessment within the integrated curriculum framework. Moreover, it is essential that teachers receive comprehensive guidance on the creation and maintenance of student portfolios that accurately reflect individual learning progression and achievement. This necessitates a well-defined content mapping on ten different modalities of teacher professional development initiated by CEHRD to respond to the varying levels of teacher expertise. Furthermore, ICT platforms can facilitate large-scale training initiatives, provide ongoing support resources, and develop collaborative learning communities among educators. This equips teachers with the knowledge and skills necessary to implement effective assessment and portfolio management practices within IC.
Absenteeism	Student absenteeism presents a significant challenge in some schools. Addressing irregular student attendance and implementing effective strategies to reduce absenteeism pose considerable difficulties for both school administrators and an individual teacher.	Regular communication and collaboration, along with the development of engaging and stimulating pedagogical approaches, hold potential for mitigating student absenteeism.
Training	A limited number of teachers have	A comprehensive content mapping strategy is

	received professional development related to integrated curriculum frameworks. Furthermore, among those who participated in such training, the application of acquired knowledge, skills, and competencies to instructional practices remains insufficient. During FGD, some participants questioned the efficacy of the training received. A critical gap exists in ongoing support mechanisms designed to address the specific needs of these educators in implementing integrated curriculum principles. For instance, a lack of familiarity with color-coding methodologies was observed. The learning progression assessments provided within the workbook is underutilized.	essential for integrated curriculum training, particularly given in ten distinct modalities employed by the CEHRD. This strategy is crucial to preventing redundancy across professional development offerings and maximizing training efficacy. Enhancing the overall efficiency of these training programs should be the key priority. Teachers need access to model lessons demonstrating thematic connections, the integration of soft skills, and effective assessment strategies. These models will serve as a foundation for teachers' own lesson planning and implementation. Furthermore, the provision of follow-up support for educators after training is a vital consideration for sustained professional growth and successful integration of learned concepts into classroom practice.
Parental involvement	Parental engagement in school academic activities is limited. A prevailing perception among parents appears to be that their primary responsibility lies solely in sending their children to school. Consequently, there is an expectation that the school and its educators have full responsibility for all aspects of student learning. Parental involvement is largely confined to contributions towards infrastructure development and resource generation. Teacher-parent meetings are typically restricted to the distribution of grade reports following terminal examinations, limiting parental participation in the academic sphere.	A systemic approach to regular parental engagement is essential. Parental contributions to infrastructure and resources are valuable but require significant expansion. Parents should also be actively and consistently engaged in academic enhancement initiatives. This could include participation in school academic activities, providing input on student learning needs, contributing to school improvement plans, and actively supporting learning at home. Furthermore, regular communication and collaboration between parents and teachers are crucial for a shared understanding of student progress and developing strategies to address individual learning challenges.
Additional subjects and English as a medium of instruction	Some community schools have adopted Science, Computer and English as extra subjects to compete with institutional schools and enhance student enrollment and retention. This strategic decision aims to satisfy parental expectations, favoring English medium instruction. However, this is limiting the credit hours prescribed for other subjects.	A thorough needs assessment should be conducted to understand the genuine learning needs of students and the community's aspirations for education. This assessment should inform curriculum development addressing local contexts and priorities. Instead of solely focusing on English medium instruction as a competitive strategy, community schools should invest in high-quality teacher professional development focusing on effective pedagogy across all subjects. This will enhance the overall quality of education and make the schools attractive based on academic excellence rather than simply the medium of instruction. Furthermore, community engagement, awareness campaigns, and parent education are crucial to address misconceptions about English medium instruction as a symbol of quality.
Monitoring and Supervision	The monitoring and supervisory framework for educational institutions	To address the weakened monitoring and supervisory framework, it is necessary to

	has been significantly weakened due to terminations of services provided by Resource Persons (RPs) and the limitation of human resources at both the Education Development and Coordination Units (EDCUs) and Local Education Units (LEUs). Furthermore, a lack of effective coordination between EDCUs and Local Governments (LGs) is likely to hinder the successful implementation of integrated curriculum frameworks. Consequently, the provision of monitoring, supervision, and professional support for teachers is severely compromised.	establish a feasible regulatory body for monitoring, supervision, and teacher support on a regular basis that coordinates with EDCUs, LEUs, and schools. Moreover, addressing the human resource deficit at EDCUs and LEUs is essential. Furthermore, strengthening coordination mechanisms between EDCUs and LGs is vital.
Resources and Materials	A scarcity of essential materials and resources, including furniture, TGs, Reference materials, ICTs, and reliable internet connectivity, constitutes a significant challenge.	Prioritization of necessary resources, community involvement, seeking grants, optimum utilization of existing resources and exploring cost-effective alternatives are essential.
Credit Hour	The allocated instructional time, as specified by the curriculum's credit hour requirements, is not being fully utilized due to the incorporation of supplemental instruction in English, Science, and Computer. Moreover, the curriculum presents an excessive content load for students entering grade one without prior pre-primary education experience.	The curriculum review is necessary to determine if the supplementary English, Science, and Computer instruction can be integrated within existing credit hour allocations rather than added as extra subjects. This could involve a realignment of content and a focus on interdisciplinary connections.

2-2-4 Hamro Serophero

(1) Overall

The focus group discussions were conducted at community schools, which were Upallo Pekhu Secondary and Janaki Secondary School in Syangja district, Himalaya Basic and Saraswoti Secondary School in Sankhuwasabha district, and Maheswor Secondary and Sharada Saraswoti Secondary School in Kanchanpur District.

The schools were situated in a relatively advantaged area by economy. However, families with poorer economic status send their offspring to community-based Schools. FGD was conducted with the participation of the head teacher, subject teachers, local curriculum experts, students, representative members of SMC, PTA, LG, LEU, IBSE project (JICA), EDCU officers, CDC and CEHRD officers, etc.

Present Situation of Implementation of Integrated Curriculum

The implementation of an integrated curriculum in Nepal has been an initial process, with various developments and challenges. Hamro Serofero is an interdisciplinary subject. Most of the schools were given fewer credit hours than the curriculum allocated. The Integrated curriculum was implemented

without proper training for teachers and stakeholders. Even those teachers who have training in the integrated curriculum are also confused about how to integrate multidisciplinary subject themes. So, most teachers use traditional teaching methods, and many educators find it difficult to shift to a more interdisciplinary approach that integrated curricula demand. Under such circumstances, understanding the concepts of units and competencies in the new curricula is challenging.

Monitoring and Supervision System

Proper monitoring and Supervision mechanisms to assess the success of implementing an integrated curriculum are not promptly adopted. The LEU and EDCU don't have proper coordination for monitoring and supervision systems of integrated curricula due to a lack of human resources and many other reasons. Monitoring and supervision systems are not developed to evaluate the achievement of training that assesses whether the trained teachers are able to apply the knowledge and skills learned from the training in the classroom or not.

Assessment System

The curriculum demands theme-wise assessment for Hamro Serofero, but common practice for maintaining students' achievement is based on term-wise exams and annual exams conducted by the LEU office at the end of the educational academic year. These exams are prepared at the LG level and do not align with the competency framework. Most of the teachers do not have knowledge, and those teachers who have knowledge of continuous assessment, as envisioned by the new curriculum, are not applying it for assessment. In this context, conducting continuous assessment evaluations becomes difficult for teachers in an integrated curriculum. An integrated curriculum must be launched effectively for better results of IC, proper training, adjustments, feedback, and improvements.

Teachers' Training and Resource Materials

Most of the teachers are still deprived of training in the integrated curriculum. Those teachers who have had an opportunity for TPD (Teacher Professional Development) have also not completed the whole package of it. Those teachers who have training are also confused about teaching via an integrated approach.

Schools, especially in rural and remote areas, frequently face a shortage of teaching resources such as teaching materials, curriculum, workbooks, TG, multimedia tools, or even basic infrastructural facilities that are essential for the approach. Without these resources, it is challenging to teach such subjects in an interconnected, thematic way.

Community and Parental Involvement

As the students at the community school were from a poor economic community, they were not cautious about their children's education. The community couldn't raise questions about the role of school activities and teachers' responsibility for their children's education in case they did wrong.

Most of the parents didn't know the new approach to teaching methods of integration. As they practiced the traditional method of evaluation, they preferred to schedule exams that were practiced. So, it is better to advocate for clearer communication between schools and parents about the goals, benefits and structure of the integrated curriculum. This transparency would help parents better support their children's education.

(2) Issues (Understanding and challenges of IC)

Integrated curriculum was implemented during the period of Covid 19 without much preparation. So, it faces many challenges in different areas or aspects, here are some of the main challenges that impede its effective implementation.

I. **Insuffient Training of Teachers:** Most of the Teachers didn't have proper training to implement an integrated curriculum effectively. Traditional methods of teaching are deeply followed, and many trained teachers also find it challenging to teach with the concept of interdisciplinary approach that integrated curricula demand.

II. **Remained legacy of Traditional Assessment: T**he traditional examination and assessment system in Nepal typically focuses on rote memorization rather than understanding interdisciplinary concepts. The assessment system in most of the subjects is based on term-wise exams and annual exams conducted by the LEU office or other institutions known as the exam committee at the end of the educational session. To assess the achievements of the students, it must be done thematically and recorded in a portfolio-based file for regular assessment. Instead, it has been understood as a liberal promotion policy, which has caused a major issue of having an inappropriate assessment.

III. **Inadequate Resource Materials:** Many schools in Nepal struggle with lack of teaching materials, multimedia equipment and insufficient technological support. Even teachers neglect to use locally available teaching materials, which makes it difficult to implement an integrated approach to teaching. Schools, especially in remote areas, frequently face a shortage of teaching resources such as workbooks, Curriculum, Teachers' Guides, multimedia tools, and even basic facilities that are essential for an integrated approach.

IV. **Deficiency of Monitoring and Supervision System:** Monitoring and supervision mechanisms must be appropriate to achieve the targeted goals of an integrated curriculum. The Local Education Office, EDCU and other governmental offices don't have enough coordination for an effective monitoring and supervision system of the integrated curriculum. Weak mechanisms of monitoring and evaluation systems impede the implementation of the integrated curriculum in Nepal.

V. **Insufficient Coordination Among Teachers, Head Teacher, Parents, and Stakeholders.** Integrated curriculum is designed as an interdisciplinary and multidisciplinary subject taught on the basis of different themes. So, subject teachers, head teachers, parents and stakeholders must coordinate with each other to achieve the targeted goals of the integrated curriculum. The

evaluation system of students and teaching approach is totally different from the past. However, there was not enough coordination among all before implementing the integrated curriculum.

VI. **Allocation of Insufficient time for Hamro Serofero and irrelevant workbooks were taught.** Most of the schools allocate time that is not sufficient as the curriculum demands for the Hamro Serofero subject. Some schools have taught science and physical education workbooks in Grades 1-3 written in the English medium with collaborating Hamro Serofero subject.

(3) Key observation

The implementation status of the integrated curriculum is summarized in Table 2-21, focusing on five key aspects: the Present Situation of Implementation of Integrated Curriculum, Assessment System, Teachers' Training and Resource Materials, Community and Parental involvement, and Monitoring and supervision.

Table 2-21 Key observations from Focus Group Discussion

Title	Obversation	Possible Solution
Present Situation of Implementation of Integrated Curriculum	➢ Hamro Serofero subject is taught without integration. ➢ Teachers don't have any idea how to teach based on theme in integrated curriculum. ➢ Subject-specific teachers are assigned, and multidisciplinary subjects are taught without integration and coordination among the teachers. ➢ Insufficient time allocated for Hamro Serofero subject, and irrelevant English medium workbooks are taught in grades 1-3 with this subject.	➢ It requires a multifaceted approach that involves teacher training, policy reform, resource allocation, and community involvement related to IC. ➢ It is better to develop mentorship programs where experienced educators can guide others in implementing integrated learning strategies to meet the expectations of IC. ➢ It requires Teachers' guide to provide clear guidance on how themes can be integrated while ensuring the achievement of integrated curriculum
Assessment System	➢ Assessment system in most of the subjects are based on term-wise exams and annual exams instead of theme wise evaluation. ➢ Most of the teachers know the concept of the assessment system in an integrated curriculum, but they are confused about how to keep a record of assessments. ➢ All the parents are unfamiliar with the regular formative assessment system and demand term-wise and annual exams to assess their students for upgrading classes. ➢ Most of the teachers assess the students orally in the classroom	➢ It is necessary to provide training to the teachers with guidelines on how to align assessments in CAS with integrated learning objectives. ➢ The teachers need to shift from rote memorization-based assessments to those that measure the application of knowledge, critical thinking, and interdisciplinary understanding. ➢ It is necessary to motivate the teachers to implement project-based assessments, collaborative work, and reflective practices.

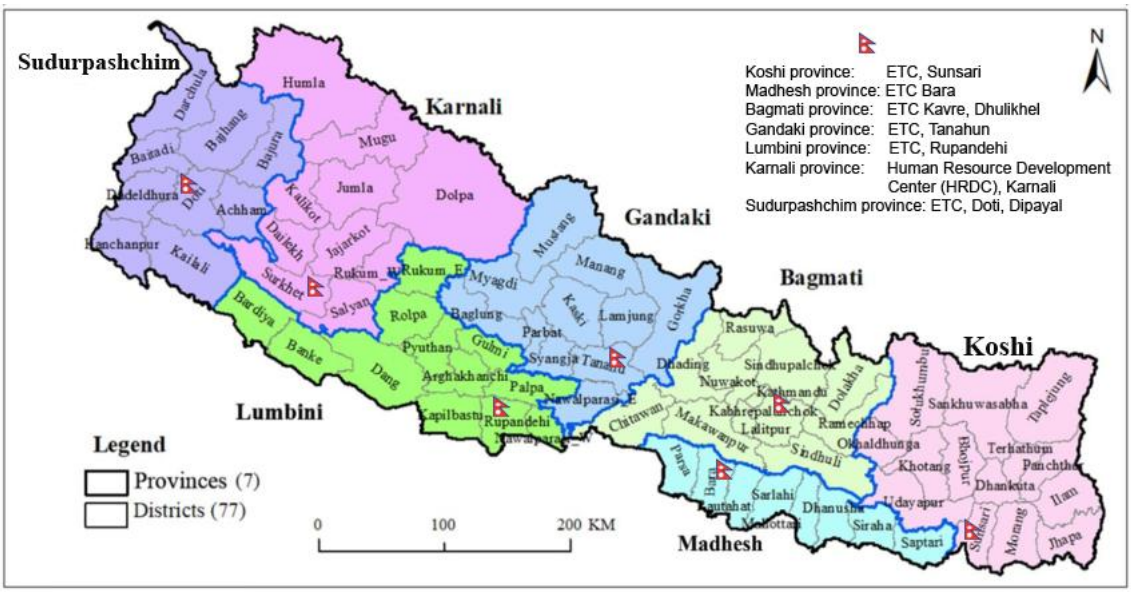
	while teaching.	
Teachers' Training and Resource Materials,	➢ Most of the teachers don't have integrated curriculum training and those who are trained are also confused about how to teach an integrated approach. ➢ Those teachers who have TPD certification training don't complete the full package. ➢ Knowledge, skill, and competency learned through the training are not applied in classroom teaching due to a lack of monitoring and supervision. ➢ Insufficient basic infrastructure facilities and teaching materials, and resources like furniture, classroom, curriculum, TG, smartboard, multimedia tools etc.	➢ Federal and Local governments must increase the investment in ongoing, high-quality teacher training programs focused on the principles of an integrated curriculum. ➢ Teachers need to be equipped with the skills to design and deliver lessons connecting with different multidisciplinary subjects and fostering critical thinking. ➢ It is good to develop mentorship programs where experienced educators can guide others in implementing integrated learning strategies. ➢ Teachers need to incorporate with the facilities of digital tools and online platforms to support an integrated curriculum. ➢ It is good to provide teachers with digital literacy training for effective use of interactive lessons, educational videos, and virtual classes
Community and Parental involvement.	➢ Community and most parents are not cautious about their children's education as they are from poor economic status. ➢ Parents don't know the new approach to the teaching method of an integrated curriculum. ➢ Parents demand English medium and additional workbooks like private schools. ➢ Parents prefer the traditional method of the evaluation system.	➢ Increased engagement of communities and parents is commendable to understand the value of an integrated curriculum. ➢ It is necessary to organize community workshops and parents' meetings to educate parents about the benefits and reduce the gap related to an integrated curriculum between the school and home. ➢ It is better to foster a sense of ownership among local communities by involving them in decision-making processes regarding school reforms.
Monitoring and supervision System	➢ Monitoring and Supervision mechanisms become paralyzed. ➢ No coordination between LEU and EDCU for monitoring and supervision of integrated curriculum. ➢ There is a lack of monitoring and supervision system to evaluate the trained teachers' competency	➢ It is necessary to set up a national body mechanism collaborating with local government to oversee curriculum reforms and track progress. ➢ Developing a robust system for monitoring and supervision for the success of integrated

		in classroom activities and to check if they apply the knowledge and skills learned from training in the classroom or not.	curriculum implementation is essential. ➢ It should be ensured that the knowledge and skill learned from training are applied in the classroom teaching and evaluation process.

Appendix III. Results of ETC Survey

3-1 Implementation Status of Certification TPD Training on IC in ETC

Figure 3-1 Location of ETC



Education Training Center (ETC) is operated in each province under the direct supervision of the provincial-level Ministry of Social Development to address regional training needs. CEHRD has the mandate to formulate the training curriculum. Each ETC has three or four branch offices (extended ETC) in the provinces, which provide easy access for those participating in training and other activities. The official name of ETC is shown in the upper right corner of Figure 3-1. However, the name shown in the "ETC" column in Table 3-1 below will be used in this chapter.

3-2 Result of the Survey

The IBSE Project team visited 7 ETCs from October to December 2024 to gather information on the implementation status of certification TPD training on IC at ETCs. The results are summarized below.

(1) Number of Personnel

Table 3-1 shows the number of personnel at each ETC. The numbers provided are based on data at the time of the survey and may differ from the current situation.

According to the survey results, there are still vacant and open positions in each ETC, and now in the process of fulfillment, which indicates that the personnel shortage is continuing. Especially technical officers (there are six approved positions of technical officers in each ETC), many positions are vacant.

Table 3-1 The number of ETC personnel

ETC	Chief	Director	Section Officer	Technical Officers (Subject-wise)	Roster Trainer (Roster expert)	Admin personals	Others
ETC Sunsari	1	0	1	1	75(of which 35 people oversee IC)	4	3
ETC Bara	1	0	1	5	80(of which 4 people oversee math)	3	4
ETC Dhulikhel	1	1	1	4	150	2	-
ETC Tanahun	1	0	1	5	125 (of which 25 people oversee math)	6	2
ETC Rupandehi	1	0	1	2	350	4	-
ETC Surkhet	1	1	0	1	48(of which 6 people oversee math)	12	0
ETC Dipayal	1	0	1	0	150 (of which 5-7 people oversee math)	2	3

Date of the survey：Sunsari Oct. 29, 2024, Bara Nov. 17, 2024, Dhulikhel Oct. 28, 2024, Tanahun Nov. 19, 2024, Rupandehi Nov. 19, 2024, Surkhet Dec. 16, 2024, Dipayal Nov. 19, 2024

The number of Roster Trainers varies among ETCs. The reason for this could be the lack of a qualified person for the Roster Trainer or the fact that ETC may not actively try to recruit, etc.

(2) Budget for the Training

The budgets for the certification TPD training on IC (Phase 2) for this fiscal year (July 2024 to June 2025) and the certification TPD training based on the new TPD framework are shown in Tables 3-2 and 3-3.

The budget for face-to-face mode of the training in the certification TPD training on IC (Phase 2) ranges from approximately NPR13,000 to NPR17,000 per person, while the budget for online mode of the training is about NPR 7,000 per trainee. The budget for online training is about 50% of that for face-to-face training.

The budget for the certification TPD training for G1-5 teachers based on the new TPD framework is approximately NPR 4 million for each ETC. This budget covers all the certification TPD training, including certification TPD training for G1-3 on IC.

Table 3-3 shows the provincial government's budget for the certification TPD training based on the new TPD framework. Sunsari ETC and Dipayal ETC have secured provincial budgets for the training.

Table 3-2 Budget for the certification TPD training (Federal government 2024/2025）

ETC	TPD for IC (2nd phase) (NPR)	Certification TPD training for G1-5(NPR)
ETC Sunsari	Face to Face: 3,360,000 (target 210) Online:1,120,000 (target 160)	3,750,000 (target 150)
ETC Bara	Face to Face: 4,960,000 (target 370)	3,750,000 (target 150)
ETC Dhulikhel	Face to Face: 4,800,000 (target 300) Online:1,120,000 (target 160)	3,750,000 (target 150)
ETC Tanahun	Face to Face: 4,800,000 (target 300) Online:1,120,000 (target 160)	3,750,000 (target 150)

ETC Rupandehi	Face to Face: 5,920,000 (target 360)	3,750,000 (target 150)
ETC Surkhet	Face to Face: 5,100,000 (target 300) Online:1,120,000 (target 160)	4,050,000 (target 150)
ETC Dipayal	Face to Face: 5,100,000 (target 300) Online:1,120,000 (target 160)	4,050,000 (target 150)

Table 3-3 Budget for the certification TPD training (Provincial government 2024/2025)

ETC	TPD for IC (2nd phase) (NPR)	Certification TPD training (NPR)
ETC Sunsari	0	8,100,000 (target 324)
ETC Bara	0	0
ETC Dhulikhel	0	0
ETC Tanahun	0	0
ETC Rupandehi	0	0
ETC Surkhet	0	0
ETC Dipayal	0	2,210,000 (target 170)

In the current year plan and budget, the certification TPD training for G1-5 teachers based on the new TPD framework is planned. There is no separate budget for the certification TPD training on IC. Therefore, if the training is conducted during this fiscal year, the TPD training on IC will be incorporated into the training for teachers who teach grades 1 through 5.

(3) Implementation Status of Certification TPD Training on IC in this Fiscal Year

Although the revised TPD framework was introduced in October 2024, CEHRD has not yet finalized the curriculum of certification TPD training on IC based on this framework as of January 2025. CEHRD drafted the training curriculum and conducted a consultation meeting with concerned people (teachers, headteachers, Roster Trainers, etc.) to collect comments and suggestions for the draft. After this consultation meeting, CEHRD submits the draft to the Council for Educational Human Resource Development for approval of the curriculum.

The preparation process for the master trainer training will start after the training curriculum finalization. Therefore, certification TPD training based on the new TPD framework has not yet been implemented in any of the ETCs, although it has been budgeted for as described in the previous section.

As for the certification TPD training on IC, since there are still some trainees who are eligible for training based on the former TPD framework (those who did not take the Phase 2 training), the certification TPD training on IC (Phase 2) in accordance with the former TPD framework has been budgeted for this fiscal year. The training will be implemented in all ETCs by the end of this fiscal year (June 2025). Specifically, ETC Sunsari has made good progress, with approximately 70% completed as of October 2024, and ETC Tanahun has also done approximately 60% as of November 2024.

However, the training for those who have not completed the certification TPD training on IC (Phase 2),

excluding ETC Dipayal, cannot be completed in this fiscal year only. Therefore, the six ETCs need to request a budget from CEHRD to continue the implementation of the certification training on IC (Phase 2) in the next fiscal year and beyond.

CEHRD aims to complete the certification TPD training (phase 2) within 2 years. Thus, the current fiscal year and next fiscal year will be the phase of transition to the new TPD framework, and it is anticipated that training based on both the older framework and the new framework will be conducted simultaneously.

As mentioned above, the curriculum for the certification TPD training on IC based on the new TPD framework has not yet been approved as of January 2025, and CEHRD is still developing the training materials. Once these are finalized, master trainer training will be conducted at CEHRD, and then training will be provided at each ETC.

(4) Implementation Method of Certification TPD Training on IC

The certification TPD training on IC (Phase 1) based on the previous TPD framework was conducted either face-to-face or online (utilizing Zoom and Google Meet) mode at all ETCs, excluding ETC Dipayal.

The training is not implemented in a hybrid mode of face-to-face and online mode, simultaneous delivery. Based on the allocated budget, it is being carried out using only one method, either face-to-face or online. The Phase 2 training scheduled for this fiscal year will be conducted either face-to-face or online mode in the same manner as Phase 1. In ETC Dipayal, Phase 1 was conducted in a face-to-face mode only, and Phase 2 is also planned to be held in a face-to-face mode only. ETC Rupandehi, on the other hand, responded that any of the methods, including face-to-face, online, hybrid, and use of LMS, are technically feasible. In practice, however, as with other ETCs, it is implemented face-to-face or online mode.

The TPD training based on the new TPD framework scheduled for this fiscal year is primarily planned to be conducted face-to-face mode only.

Table 3-4 Training delivery methods for Certification TPD Training on IC

ETC	TPD for IC (1st phase)	TPD for IC (2nd phase)	Certification TPD training (2024/2025)
ETC Sunsari	Face-to-face or online	Face-to-face or online	Face to face (tentative)
ETC Bara	Face-to-face or online	Face-to-face or online	Face to face (tentative)
ETC Dhulikhel	Face-to-face or online	Face-to-face or online	Face to face (tentative)
ETC Tanahun	Face-to-face or online	Face-to-face or online	Face to face (tentative)
ETC Rupandehi	Face-to-face or online	Face-to-face or online	Face to face (tentative)
ETC Surkhet	Face-to-face or online	Face-to-face or online	Face to face (tentative)
ETC Dipayal	Face-to-face	Face-to-face	Face to face (tentative)

(5) Trainers and Trainee

ETC trainers and ETC roster trainers serve as training instructors for the Certification TPD Training on IC. University teachers, school head teachers, etc., are invited as guest lecturers. In some cases, CDC curriculum officers or CEHRD technical officers are invited as guest lecturers at ETC Dhulikhel.

The total number of training participants is determined based on the approved budget, but all ETCs generally have approximately 30 participants per training. Training participants are selected in the manner shown in Table 3-5. Except for Surkhet ETC, the LG/LEU selects the teachers to participate in the training. Surkhet ETC has stated to nominate the training participants by online methods this year so that ETC can verify the information submitted by the teachers in the training application form.

According to Rupandehi ETC, most teachers in charge of the integrated curriculum for grades 1 to 3 are temporary, locally hired, and are not always selected for training. As a result, they are not given the opportunity to attend the training.

Table 3-5 Selection process for the training participants of certification TPD Training

ETC	TPD for IC (2nd phase)
ETC Sunsari	ETC sends a letter to EDCU regarding the selection of training participants; after the letter is sent from EDCU to LEU, LEU selects training participants and submits the list.
ETC Bara	After ETC determines the number of trainees for each LG, ETC notifies the training program on the website. Google Form and letter are sent to EDCU and the appropriate LG; LEU nominates the trainees and notifies ETC.
ETC Dhulikhel	ETC prepares Google Form and sends it to LG, and LG uploads the Form to their website. Teachers apply directly to LG through the form. LG then nominates the trainees based on the selection criteria (teaching experience and training history).
ETC Tanahun	Face-to-face： ETC determines the number of trainees for each LG and sends a letter to the relevant LEUs; the LEUs select the trainees and inform ETC. Online： ETC prepares Google From, and teachers apply for the training directly.
ETC Rupandehi	After ETC determines the number of trainees per LG, Google Form and the letter are sent to EDCU and LG; LEU determines the trainees in consultation with the head teacher and informs ETC through EDCU.
ETC Surkhet	ETC (HRDC) prepares Google Form and teachers apply directly. ETC (HRDC) selects appropriate teachers to participate in the training.
ETC Dipayal	ETC sends the letters to the LEUs, and LEUs select the training participants.

(6) Strengths and Weaknesses of Online Mode of Training

Based on the ETC's responses, the strengths and weaknesses of online mode of training will be summarized below.

Strengths

- **Saving travel time**: since training participants can attend the training from their home or workplace, they can save traveling time and reduce the burden of moving.
- **Cost reduction:** there is no need for travel expenses, per diems, or accommodation costs, which

helps reduce the expenses associated with training operations.

- ☐ **Flexible time system:** lecture times can be scheduled early in the morning (6:00 am to 10:00 am) or at night (4:00 pm to 8:00 pm) without interrupting daytime work.
- ☐ **Flexible locations:** participants can join from anywhere with an internet connection.
- ☐ **Improving IT skills**: getting familiar with tools such as Zoom. Acquiring new technical skills.

Weaknesses

- ☐ **Technical challenges:** unstable internet connection and limitations of the devices affect the smooth implementation of the training—interruptions due to power cuts, frequent disconnections, and unclear audio due to unstable internet connection. Remote areas do not have a well-organized internet environment, making it difficult for participants to participate from remote areas. Some participants do not have PCs or mobile devices.
- ☐ **Low IT and digital literacy:** do not know how to use Zoom (especially "breakroom"). The inability to use digital tools prevents learning. Even trainers may not be able to use the tools either fully.
- ☐ **Lack of financial support:** participants' allowance (200 NPR) is not enough.
- ☐ **Limited interaction:** participants have less direct interaction with each other and the trainer compared to face-to-face sessions. Limited opportunities to resolve questions and concerns. A limited number of speakers.
- ☐ **Keeping motivation:** it is challenging to stay concentrated when participating at home or in the workplace. In some cases, participants attend training while working on other tasks.
- ☐ **Limited feedback:** immediate feedback on training content is challenging to obtain, and individualized responses may be insufficient.
- ☐ **Inability to provide training that includes practical skills:** training in practical skills and activities that require hands-on practice are difficult to adapt to an online format.

(7) Differences in Understanding and Quality depending on the Mode of Training

Regarding the differences in understanding and quality by mode of the training delivery, ETC Rupandehi responded as follows.

"There was no difference in participants' level of understanding or the quality of training, whether face-to-face or online, and both modes of training provided sufficient opportunity for discussion and promoted deeper understanding among the participants."

ETC Sunsari also responded,

"There is no significant difference between both training modes in terms of level of understanding and quality. This is because the selection process for the online training is strict, and only those with digital

skills and knowledge are selected."

These ETCs believe that whether the training is conducted face-to-face or online does not have a significant impact on the quality of the training. On the other hand, the other five ETCs believe that face-to-face training improves the quality of the training more than online mode of training. The main responses are as follows:

- Participants become more interactive through face-to-face mode, with more opportunities for discussion. Therefore, face-to-face training improves the quality of learning as it is more interactive and focused.
- Face-to-face training promotes a deeper understanding and better retention of what the trainee has learned.
- In face-to-face training, participants' feedback can be obtained immediately, allowing real-time adjustments based on their learning needs.
- Face-to-face sessions promote greater engagement through direct interaction, hands-on activities, and collaborative discussions.
- Body language and nonverbal signs are important to further enhance communication, increase participants' understanding, and maintain interest. Therefore, face-to-face mode of training is more effective.
- Face-to-face is less distracting and allows the participants to focus on the training.
- Face-to-face sessions promote more engagement, immediate feedback, and direct involvement in practical work and group tasks. And it improves the quality of understanding and practical skills. Although online sessions provide flexibility and accessibility, there are significant challenges in maintaining attention and active participation.

(8) Differences in Certification (pass/fail) based on the Training Mode

As mentioned in the previous section, face-to-face and online mode of training have their own characteristics, and the majority of ETCs agreed that face-to-face training supports better quality and better understanding for training participants compared to online mode of training. However, every ETC indicated that there was no significant difference in the percentage of participants passing the examination for the certification training between face-to-face and online. Specifically, "The pass rate for face-to-face training participants is almost 100%, while the pass rate for online training participants is 95-96%. The remaining 4-5% of participants may have been unable to complete their sessions due to unstable internet connections or power cuts." (ETC Bara mentioned.)

For both face-to-face and online training, pass/fail evaluations are based on the results of online examinations, as well as daily learning attitudes, project assignments, and attendance rates.

(9) Summary

IBSE project plans to collaborate with CEHRD to explore a blended mode of training for the certification TPD training on IC, incorporating both face-to-face and online methods to utilize the strengths of both approaches. Fortunately, there is no significant difference in the pass rate of the final examinations depending on the training method. Therefore, more effective use of online training will also help reduce costs.

As mentioned in section 3-6, online training has advantages and disadvantages. In Nepal, there are many remote areas where internet access is insufficient, and technical challenges such as unstable connectivity and interruptions due to power cuts are common.

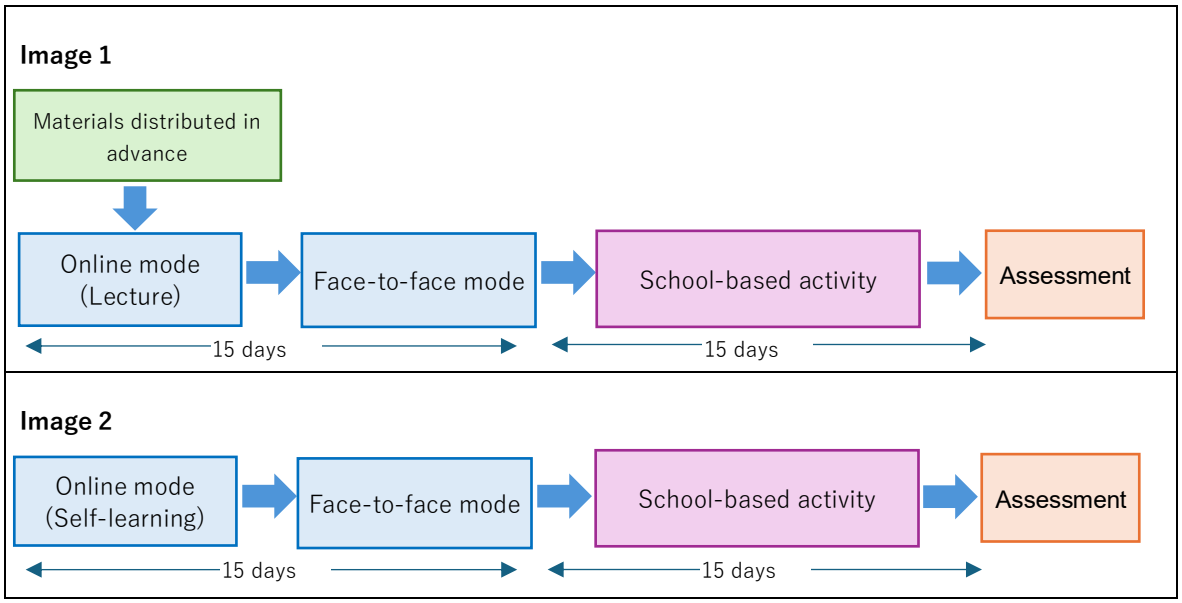
Though it is difficult to resolve these issues quickly, several measures can be considered to maximize the benefits of online training.

For example, participants in areas with unstable internet access can be given video recordings of training content and materials in advance to provide a flexible learning environment regardless of time or location. It is also effective to record the training and make it available for later viewing to prepare for power cuts or bad connections.

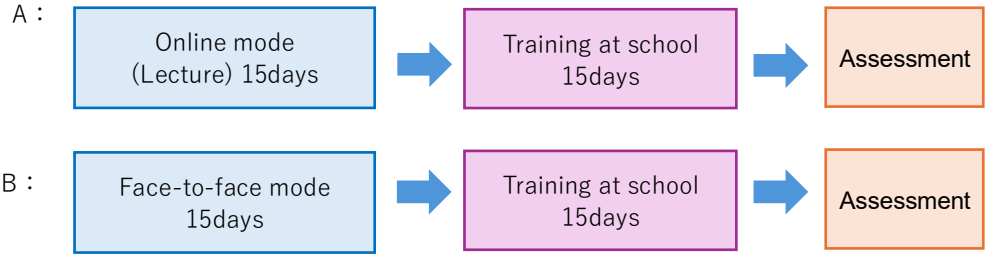
On the other hand, considering the effectiveness of face-to-face training, a blended approach that combines online and face-to-face training can further enhance learning by facilitating direct communication among participants and trainers through face-to-face training.

The blended mode allows training to be conducted more flexibly to meet various training needs. It could provide an effective and accessible training environment for the participants.

Figure 3-2 Image of training by blended mode (combination of face-to-face and online)



Currently, certification TPD training is conducted in either A or B below.

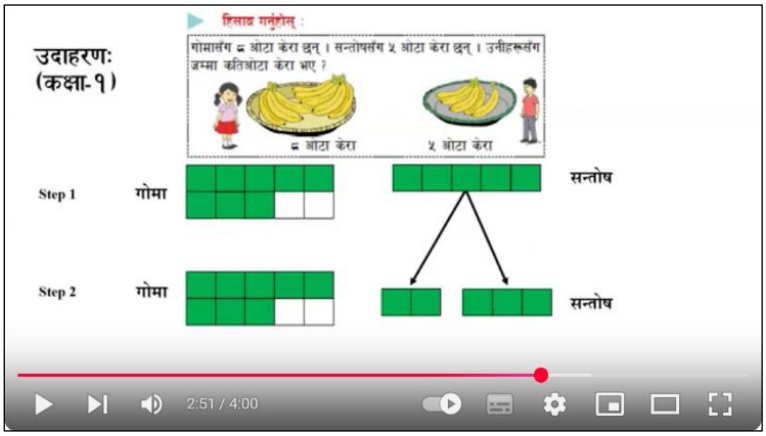


3-3 Initiation by the ETC Rupandehi Trainer

A trainer at ETC Rupandehi has produced lecture videos on how to teach mathematics effectively. Each lecture is 10-15 minutes in length, as videos that are too long tend to lose the trainee's attention. These videos are uploaded privately to YouTube, and links are shared with trainees. According to the trainer, this approach allows training participants to learn the content prior to attending the training, significantly reducing the time required for actual training discussions. This pre-learning strategy efficiently utilizes training time and contributes to minimizing the amount of time teachers need to be away from school while participating in the training.

Survey at Rupandehi ETC (Nov. 2024)

Figure 3-3 Example of video material for the pre-learning



◆ Ideas on Blended Mode by ETC Rupandehi Trainer

All training programs can be conducted in a blended mode. Blended mode training combines traditional face-to-face sessions with online resources, recorded videos, guest lectures, and other digital materials. For example, blended mode training includes the following three processes:

Face-to-face sessions: In-person sessions are held directly at the training venue.
Online discussions: Interactions conducted through an online platform.
On-site practice: Teachers participating in the training work on tasks at their own schools.

This approach is intended to simplify the training process and reduce the number of face-to-face training days. For example, a typical 10-day training program often requires teachers to be away from their schools for about two weeks or more. This creates significant problems for the school and creates difficulties for the headteacher regarding how to manage school operations during the teacher's absence. Long-term teacher absences can interfere with class schedules and result in delays in student learning.

To address these challenges, blended mode training, which combines synchronous and asynchronous methods, integrating both face-to-face and online elements, is considered an effective approach.

Appendix IV. Baseline Survey Guidance

4-1 Questionnaire Guidance

4-2 Questionnaire Guidance Appendix

5-3 Baseline Survey Manual for District Coordinators

4-4 Rubrics

4-5 Item Analysis for Baseline Survey

Appendix V. Questionnaire

5-1 Student Questionnaire

5-2 Teacher Questionnaire

5-3 Head Teacher Questionnaire

5-4 LEU Questionnaire

5-5 EDCU Questionnaire