Study Report on Time-on-Task/Time Table for Reading Instruction

in

Early Grades in Nepal

Submitted by

Prof. Basu Dev Kafle

Lead Consultant

to

Early Grade Reading Program (EGRP)

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List of Abbreviations

CDC   Curriculum Development Centre

CLAs   Central Line Agencies

DOE   Department of Education

DEO   District Education Office

EGRP   Early Grade Reading Program

TLM   Teaching and Learning Material

SS   School Supervisor

SMC   School Management Committee

SRM   Supplementary Reading Materials

PTA   Parent-Teacher Association

NEGRP   National Early Grade Reading Program

grades. The schools have been using TLMs in schools under previous time frame of teaching 45 minutes per period. Some schools have been managing more than 45 minutes for each period while teaching for early grades using TLMs. However, there is not uniformity of time allocation in EGRP schools for early grades. The reading framework that consists of six components, namely phonological awareness, grapho-phonological awareness, fluency, vocabulary, comprehension and writing basically demands 90 minutes for developing reading skills and habit of reading of the early grade children, which is one of the prime objectives of the EGRP. To-date, there has not been any an in-depth exploration on the time-table requirement for teaching Nepali language in early grades. These concerns, therefore made the importance for this study to be undertaken. Thus, there is a strong case for carrying out an exploration of the time requirement for teaching Nepali in early grades using TLMs prepared by EGRP under the standard reading framework.

The time requirement for language of reading and instruction for early grade is the key factor that influences the learning and learning outcomes of early grade children. Regarding this, the EGRP felt the need for carrying out the study to explore the requirement of time for reading instruction for early grades. Therefore, EGRP commissioned the lead consultant to carry out this study. A team of consultants under his leadership carried out this study to identify the strengths of making more time for language of reading instruction and weaknesses of only 45 minutes for language of reading and instruction for early grades. On the basis of the findings, the study proposes that EGRP will continue to conduct policy discussion with the Ministry of Education and central line agencies (CLAs) to make provision of more time for language of reading and instruction for early grades. It is expected that the policy discussion willfacilitate for extending the teaching time more than 45 minutes per day for early grades for developing reading skills and habits of early grade children.

3. Purpose and Objectives

3.1 Purpose

The main purpose of this study is to review the research literatures and analyze the field data and present research-based findings and recommendations regarding time-table for reading instruction in early grades (1-3) in Nepali context.

3.2 Objectives

3.2.1 To review existing research literature, both internationally and in Nepal as possible, focused on time-table for reading instruction in order to identify the research-base regarding optimal time dedicated to reading instruction in school each day/week.

3.2.2 To examine existing time-table policy of the existing early grade curriculum and in-process explore the options for addressing language of reading and instruction in order to understand time-tabling concerns/issues in Nepali context and

3.2.3 To present the summary of findings and recommendations from the literature review and field data for policy options regarding time for reading instruction for early grades.

4. Focus of the Study

This study focuses on the following themes based on the scope of work (SOW) agreed between EGRP and the consultant:

4.1 Review applicable research literatures on time-table for reading instruction as well as early grade curriculum, Nepali policy documents regarding time-tabling of language of instruction for early grades.

4.2 Facilitate the Focus Group Discussion Workshop for key stakeholders at central and district levels organized by EGRP to generate field data on time-table for language of reading and instruction for early grades.

4.3 Prepare study report especially focusing the findings and recommendations on policy options for time-table for reading instruction in early grades and present the report to the team of EGRP and Central Level Line Agencies (CLAs).

4. Organization of the Report

The study report is organized in five chapters. The Chapter I presents the introduction of the study, Chapter II describes the methodology of the study, Chapter III is about the review of international and national research literatures on reading instruction of early grades, Chapter 4 deals with paradigm shift of early grade curriculum, Chapter 5 describes the data processing, analysis and interpretation and Chapter 6 deals with the synthesis of the review and field data and Chapter 7 presents summary of the findings, conclusions and recommendations of the study.

5. Overview of Early Grade Reading Program (EGRP)

5.1 Nepal EGRP Result Framework

The program titled USAID's Early Grade Reading Program (EGRP) in Nepal was started since March 2, 2015 in Nepal. The EGRP intended to build on the achievements attained in early education with the concerted efforts of USAID, the U.S. Government, the Government of Nepal (GON) and development partners (DPs). The noticeable achievements in early education are higher levels of access, especially net enrolment and improved level of equity in primary schools. The net enrolment has been reached above 95 percent whereas the gender parity in primary school has been achieved. In addition to access and equity, the EGRP, a five year program aimed at providing support to National Early Grade Reading Program (NEGRP) of Ministry of Education (MOE) to improve education quality through improving early grade reading skills of children. The main purpose of EGRP is to provide technical assistance for achieving the goals of National Early Grade Reading Program (NEGRP) of Government of Nepal (GON). In connection with NEGRP, EGRP is a technical assistance program as a part of NEGRP, the mission of the EGRP is to achieve two main goals as stated below within a five-year (EGRP document, 2015):

1. Reading skills improved: Public primary school students in grades 1–3 (G1–G3) in the 16 target districts with improved reading skills and

2. GON services strengthened: The Contractor will have supported the GON through Phase I of the Nepal EGRP and completed the design and demonstration of a national model that the GON can then implement nationwide within its budget.

Nepal EGRP Results Framework

GRP GOAL: Public primary students in the early grades (1–3) in the 16 target districts with improved reading skills

IR 1: Improved Early Grade Reading Instruction	IR 2: Improved National and District Early Grade Reading Service Delivery	IR 3: Increased Family and Community Support for Early Grade Reading
Sub IR 1.1 Evidence-based early grade reading instructional materials designed, distributed, and in use.	Sub IR 2.1: Early grade reading (EGR) data collection and analysis systems improved.	Sub IR 3.1 Community awareness of the importance of language of instruction reading increased.
Sub IR 1.2 In-service professional development for teachers in public schools on reading instruction and the use of these materials provided.	Sub IR 2.2 Policies, standards, and benchmarks that support improved early grade reading instruction institutionalized.	Sub IR 3.2 Family engagement to support reading increased.
Sub IR 1.3 Monitoring and coaching for teachers in early grade reading instruction provided	Sub IR 2.3 Planning and management of financial, material, and human resources devoted to early grade reading improved.	Sub IR 3.3: Parent–teacher association/school management committee ability to contribute to quality reading instruction increased
Sub IR 1.4 Classroom-based and district-based early grade reading assessment processes improved	Sub IR 2.4 National standards for early grade reading improvement adopted and geographically expanded.	Sub IR 3.4: Parent and community capacity to monitor reading progress increased.

With a view to achieving the above stated goal, the main intermediate results are: (i) improved early grade reading instruction (IR1), (ii) improved National and District Early Grade Reading Service Delivery (IR2) and (iii) improved family and community support for early grades (IR3). The Program's Results Framework (PRF) designed consisting of three Intermediate Results (IRs) and their sub-intermediate results (Sub-IRs) as illustrated below will help the GON to achieve EGRP's goals stated above within five-year.

2.2 Key of Intermediate Results

2.2.1 IR 1: Improved Early Grade Reading (EGR) Instruction

The sub-intermediate results of intermediate result I consist encompasses (i) Evidence-based early grade reading instructional materials designed, distributed and in use, sub-IR 1.2: In-service professional development for teachers in public schools on reading instruction and the use of these materials provided, (iii) Sub-IR 1.3: Monitoring and coaching for teachers in early grade reading instruction provided and (iv) sub-IR 1.4: Classroom based and district based early grade reading assessment processes improved. These activities under IR1 involve complex technical inputs in four areas their combined effort will result in improved Early Grade Reading Instruction (EGRI). The efforts include producing instructional materials (IMs) for G1–G3 in Nepali as Language first or mother tongue (L1), Nepali as second language (L2), and the three initial mother tongues—Awadhi, Maithili, and Tharu (originally proposed in the program document, however this may be modified viewing the national context during the course of program implementation). EGRP's assistance will also focus on developing and delivering

teacher training modules to the teachers of early grades on phase basis, establishing systems to monitor and support teachers, and supporting regular monitoring and support provided by Resource Persons (RPs) and Reading Motivators/Resource Teachers (RMs/RTs).

2.2.2 IR 2: Improved National and District EGR Service Delivery

The key program interventions of this intermediate result are: (i) Sub IR 2.1: Early grade reading (EGR) data collection and analysis systems improved, (ii) Sub-I\r 2.2: Policies, standards and benchmarks that support improved early grade reading instruction institutionalized, (iii) Sub IR 2.3: Planning and management of financial, material, and human resources devoted to early grade reading improved, and (iv) National standards for early grade reading improvement adopted and geographically expanded. As guided these sub-IRs, the focus of IR 2 is to help align and strengthen Ministry and District Systems to support NEGRP at scale. The heart of this program component will be on the policy framework and information management systems to strengthen the enabling environment for GON counterparts to perform their functions in early grade reading program. Three key outcomes from the IR2 are an upgraded national Education Management and Information System (EMIS), a comprehensive set of NEGRP performance standards, and a set of program-based planning and budgeting tools for use at central and district levels for early grade reading program. The core intention of these enhancements will provide policymakers and decision-makers with better, timely information on the quality of teaching, learning outcomes, learner language, teachers, and materials for their resource planning and management at all levels with focus on the reading and developing reading culture of early grade children.

2.2.3 IR 3: Increased Family and Community Support for EGR

The key activities included in IR3 are: (i) Sub-IR 3.1: Community awareness of the importance language of instruction reading increased, (ii) Sub-IR 3.2: Family engagement to support reading increased, (iii) Sub-IR 3.3: Parent-teacher associated /school management committee ability to contribute to quality reading instruction increased, and (iii) sub-IR 3.4: Parent and community capacity to monitor reading progress increased. Under these sub-IRs, the IR 3 activities will focus on building understanding of the importance of children reading in their first language among parents and communities, as well as engaging parents and community-based organizations (CBOs) in evidence-based practices to support young readers. The program will provide guidance and support to SMCs, parent–teacher associations (PTAs), DDCs/VDCs, and DECs/VECs to enhance EGR activities in communities and schools. This will be implemented through a small grants program to district-based NGOs and to local organizations that will share the behavioural change and communication (BCC) messages (through various media and forums) and mobilize parents and school organizations to expand after-school reading opportunities for children, both at home and through school-and village-level planning. These social mobilizations and BCC strategies will be designed and rolled out in close collaboration with the Department of Education (DOE) and other relevant Central Line Agencies (CLAs), through the establishment of a Social and Community Mobilization Core Team at the national level and district-based coordination mechanisms, which will ensure that EGRP builds on good existing practices and will support the scale-up of EGRP in Nepal, In addition, these strategies will align closely with the methods and materials developed for IR 1 and IR 2.

2.3 EGRP Program Districts

The EGRP program districts are Banke, Bardiya, Bhaktapur, Dang, Dadeldhura, Dhankuta, Dolpa, Kailali, Kanchanpur, Kaski, Manang, Mustang, Parsa, Rupandehi, Saptari amd Surkhet. Administratively, Bhaktapur and Parsa are from Central Development Region, Kaski, Manang, Mustang, Myagdi and Rupandehi are from Western Development Region, Banke, Bardiya and Surkhet and Dolpa are from Mid-western Development Region and Kailali, Dang, Kanchapur and Dadeldhura are from Far-western Development Region. For effective implementation of the EGRP, the program has been planned to implement on phase basis. Thus, the program districts have been categorized into Cohort I and Cohort II as mentioned in the table below:

Table 1: Distribution of Districts by Cohort I and Cohort II

Cohort I District	Cohort II District	
Program Year: 2–3 (school academic year 1-2)	Program Year: 4-5 (school academic year 3-4)	Total Districts
Bhaktapur, Kaski, Manang, Banke, Kanchanpur and Saptari	Bardiya, Dang, Dadeldhura, Dhankuta, Dolpa, Kailali, Kanchanpur, Mustang, Parsa, Rupandehi, and Surkhet.	16
6	**10**	**16**

2.3.1 Program Intensity in the Cohort District

As mentioned above, EGRP has classified sixteen districts into cohort I and Cohort II where program have been in implementation on a phase basis. The cohort I of six districts is under high intensity whereas the cohort II that covers ten districts is called as low intensity. This indicates the intensity of the program in the cohort I and cohort II districts which is explained below.

Cohort 1 Districts

Cohort 1 districts (6 districts) will receive high-intensity activities in school years 1–2 (Program Years 2–3). Such activities are distribution of teaching learning materials (TLMs) and supplementary materials (SRMs) to the schools, training to teachers in EGR, community mobilization activities through mobilization of NGOs and intensive monitoring and follow up support provided during the program period.

Cohort II Districts

During school years 3–4 (Program Years 4–5), the cohort 2 (10 districts) will receive high intensity interventions as implemented in cohort I districts. The refined EGR activities will be implemented in cohort I districts so that it is expected get better impact.

The low intensity activities are common to both cohort I and cohort II districts. These activities will be implemented in all 16 districts starting in Year 2. These activities will be implemented continuously through the programs year 2-5.

2.4 Technical Approach and Strategy

The technical approach and implementation strategy of EGRP are as follows:

2.4.1 Technical Approach

RTI's technical approach consists of the following:

1. Providing embedded and other direct technical assistance services to the GON for the implementation and continuing evolution of the GON's NEGRP Plan. This will include supporting the GON to harmonize and organize the multiple contributions to EGR which have been initiated.
2. Providing technical support to the GON for implementation of NEGRP maintaining its standards, making it feasible for the GON to replicate and implement on a national scale. In this process, the effort will be made to utilize the existing resources and helping GON to improve the policies and systems for effective implementation of NEGRP.
3. Employing multiple first-language instructional methods and materials according to dominant first language, in selected languages in addition to Nepali.
4. Utilizing evidence-based strategies to increase family and community support for EGR through developing strategies and viable educational programs.

2.4.2 EGRP Implementation Strategy

EGRP will work under the leadership of the MOE and its CLAs. The CLAs are the Curriculum Development Center (CDC), Department of Education (DOE), Education Review Office (ERO) and National Center for Educational Development (NCED), The EGRP has been developing and implementing an EGR program that can be replicated and expanded to all districts of Nepal in a cost-effective and sustainable manner. Therefore, the EGRP aimed at building capacity of the system to support NEGRP. The implementation modality consists of two strategic procedures. The first one is providing technical support to GON through planning and implementation of EGRP key activities in collaboration with CLAs. The second one is the GON plans and implements EGR programs through CLAs in EGRP all sixteen districts. There is a close association of the EGR activities implemented by EGRP and GON and ultimately contribute to achieve the goal of NEGRP.

Under the above context, the EGRP plans and conducts key EGR activities. The key activities are the developing teaching and learning materials, developing teacher training manuals and delivering training, providing orientation for head teachers, conducting early grade reading assessments (EGRAs) and other ongoing formative classroom assessments, strengthening the MOE's Education Management Information System (EMIS), strengthening District Education Offices (DEOs) to effectively manage school-based EGR activities in schools, and sensitizing and mobilizing families and communities to support EGR activities in schools and communities.

CHPAPTER 2: METHODOLOGY

The study on Time-table on Language of Reading and Instruction was basically of qualitative nature. The approach of the study consists of review of national and international relevant literatures and collection of data from the key informants on the major themes from EGRP districts. Field data on the major themes of the study were collected through Focus Group Discussion (FGD) with educational personnel of District Education Offices (DEOs), head teachers, teachers, EGRP staff and government officials of Central Level Line Agencies (CLAs). The qualitative data were analyzed and interpreted on the basis of the study. The details of the methodological procedures are given in the following sections of this chapter.

2.1 Study Team

Team Leader was fully responsible to carry out the study. Under his leadership, a team of two senior researchers and Nepali Language expert was formed to carry out the activities of the study. EGRP technical team provided support to the study team as necessary to complete the study. EGRP provided support to the study team organizing workshops on time-table of language of reading and instruction for District Education Personnel and Central Level Agencies (CLAs) to generate data required for the study.

2.2 Population of the Study

With the financial and technical support of USAID, Early Grade Reading Program (EGRP) has been in implementation in Nepal since March 2, 2015. EGRP has planned to cover 16 districts on phase basis that are categorized in cohort 1 and cohort 2 districts. The cohort I district includes Banke, Bhaktapur, Kanchanpur, Saptari, Kaski and Manang. The cohort II districts are Bardiya, Dang, Dadeldhura, Dhankuta, Dolpa, Kailali, Mustang, Parsa, Rupandehi and Surkhet. Since 2015 March 2, the EGRP implementation has started from the cohort I districts which are the sources of information for this study. The distribution number of schools of Cohort I and Cohort II EGRP districts is given in the table below:

Table 1: EGRP Districts and Schools

SN	Cohort 1 Districts	Number of Schools	Cohort II Districts	Number of Schools
1.	Banke	363	Bardiya	300
2.	Bhaktapur	128	Dang	421
3.	Kanchanpur	261	Dadeldhura	249
4.	Saptari	411	Dhankuta	299
5.	Kaski	398	Dolpa	112
6.	Manang	27	Kailali	565
7.			Mustang	55
8.			Parsa	368
9.			Rupandehi	468

10.			Surkhet	
	6	**1,588**	10	**3,351**

The head teachers of the above schools were frequently oriented on EGRP programs and reading principles and framework of the reading components. Some of the head teachers and early grade teachers of the above schools have been using the educational materials developed by EGRP under the reading principles and framework. They represent as the total population and are the main sources of information for this study.

The total population of the study is the key stakeholders that can be classified at three levels: (i) central level (ii) district level and (iii) school level. The central level key stakeholders are officials of Department of Education (DOE), Curriculum Development Centre (CDC), National Centre for Education and Development (NCED) and Education Review Office (ERO). At the district level, the key stakeholders are District Education Officer (DEO), School Supervisor (SS), Resource Person (RP) and Program & Planning Officer (PPO). At school level, the key stakeholders are members of School Management Committee (SMC), Parents and Teacher Association (PTA), head teachers, teachers and students of early grades at schools.

2.3 Sample of the Study

The cohort I EGRP six districts mentioned above (table 1) and their stakeholders are the total population of this study. The key informants from District Education Office and school were purposively selected for this study. The key informants (KIs) of District Education Office (DEO) were are District Education Officer or his/her representatives, School Supervisor (SS), Resource Person (RP) and Reading Motivator (RM).The key informants of schools were head teacher, reading motivator and teacher as they are the potential for information required for the study. The members of SMC and PTA were not included in the study as they do not know the details of the principles and framework of reading of early grades. As this study is based on qualitative design, the sample size is targeted to select the potential key informants who can provide valuable information required for this study. Therefore, the sample size is small and targeted to generate data required to meet the purpose of the study. However, the sample size covered a diverse group of key informants from EGRP six districts. The distribution of key informants (KIs) is given in the table below:

Table 2: Sample Size Key Informants of the Study

SN	District	KI from DEO			KI from School			
		DEO	DC	SS	RP	HTchr	RM	Tchr
1.	Banke	1	1	9	9	9	15	9
2.	Bhaktapur	1	1	4	8	8	12	8
3.	Kanchanpur	1	1	5	7	7	10	7
4.	Saptari	1	1	7	9	9	12	9
5.	Kaski	1	1	8	15	15	20	15
6.	Manang	1	1	3	3	3	5	3

	6	**6**	**6**	**36**	**51**	**51**	**74**	**51**

The key informants selected for the study were familiar with overall EGRP program and reading components, teaching learning materials (TLM) developed based on the reading framework and its instruction design. The informants of schools such as head teachers, reading motivators and teachers have received intensive training in reading components and teaching strategy. They have gained valuable teaching experiences in teaching in early grades in school using teaching learning materials (TLMs).

However, the nature of the study is qualitative so that only a few potential key head teachers and teachers were selected for this study from the EGRP district for data collection.

3. Review of the Literatures

The study team reviewed the national and international documents about early grade reading. The national documents include education policy documents, national primary curriculum, research reports, commission reports and EGR program documents and annual reports. The international documents are published articles and reports on early grade reading. The review was focused on time allocation for language of reading and instruction for early grades in school. (Refer Annex 1 for list of national and international documents reviewed).

4. Limitation of the Study

The study team searched through internet national and international research reports, policy documents and articles on time-table for language of reading and instruction in early grades. The study team visited libraries of Curriculum Development Centre and Tribhuvan University and Kathmandu University as well to find out the research reports and other documents related to the study areas. However, the study team found that very limited research reports and articles on the concerned areas of the study.

The data were collected through two intensive Focus Group Discussions with field level educational personnel and senior level officials of central level line agencies. The data collected from the both sources were triangulated to get valid information on time-table of language of reading and instruction for early grades.

Some of the data from EGRP cohort 1 districts were collected through interview and questionnaire as well. Telephone conversation was carried out with technical EGRP personnel of EGRP district about the concerns of the time-table of language of reading and instruction for early grades.

Under above limitations, this study report has been prepared addressing the scope of work. The study team felt that it would better to have more focus group discussion workshops with educational personnel of District Education Office and schools to expand and enrich the study.

5.   Themes of the Study

The key common themes of these instruments were the following:

5.1   Existing early grade curriculum

The existing early grade curriculum component theme consists of subjects and weightage distribution, relevancy of the existing curriculum containing six core subjects, equal full marks with different weightages, challenges faced while implementing curriculum, practicability of the existing curriculum, suggestions for improvement of the existing curriculum with focus on Nepali language of instruction, subject adjustment and priority, weightage adjustment and other options for increasing weightage for Nepali language of instruction of early grade curriculum implementation.

5.2   Provision of local subject/mother tongue in existing early grade curriculum

The theme provision of local subject/mother tongues in the existing early grade curriculum cover the provision made for teaching mother tongue, basis for selecting mother tongue, difficulty to implement the provision of local subject/mother tongue, causes of not being proper implementation of this provision and other ways for effective implementation of this provision.

5.3   Restructuring of the subjects and weightage in the existing early grade curriculum

This theme includes the basis for fixing the subjects and weightage of the early grade curriculum and its justification.

5.4   Instructional design of national early grade reading program

This theme covers the reading framework consisting of phonological awareness,grapho phonemic awareness, fluency, vocabulary, comprehension and writing, need of total weightage and time for each period for Nepali language instruction and alternative ways of managing the time required.

5.5   Implementation strategy of instruction design of NEGRP

This theme consists of implementation strategy of early grade reading instructional design and educational materials developed for developing reading habit and skills, and experiences gained through the implementation of early grade reading instructional design in terms of lessons learnt, challenges and resolving ways.

5.6   Options for increasing time for language of reading and instruction

This theme includes options for increasing weightage for Nepali language of instruction and requirement of weightage aiming at achieving the purpose of developing reading skills and reading habit of early grade children.

6.   Development of Data Collection Instruments

The study team developed data collection guidelines for key informants (KIs) that focus on existing practice of weightage of language of reading and instruction and exploration of alternatives/options for increasing weightage with a view to developing reading skills and habit of the reading of early grade children.

The study team developed the above instruments and shared with EGRP technical persons for review. The instruments were finalized incorporating their commentsobtained from EGRP

personnel. The revised instruments were used in FGD workshop and interviewing the key informants of central, district and school level for data collection.

The following instruments (Refer Annex 2 for list of instruments used for data collection) were used for data collection:

6.1 Focus Group Discussion (FGD) Guidelines for Central Level Line Agencies (CLAs) of Ministry of Education

The FGD instrument for CLAs consists of different themes related to early grade reading. The key themes are analysis of the existing early grade curriculum published by CDC in 2005, instructional design of national early grade program (NEGRP) and increasing weightage for early grade based on NEGRP instructional design.

a. Analysis of the Existing Early Grade Curriculum (CDC, 2005)

The sub-themes of this main theme includes questions related to core subjects that are Nepali language, English, Mathematics, Social Studies and Creative Arts, Science, Health and Physical Education and local subject/mother tongue, their weightage and full marks.

The second sub-theme is the restructuring of existing Early Grade Curriculum that includes possibility of its restructuring with a view to increasing weightage of Nepali language instruction aiming at developing reading skills and habits of early grade children with justification.

b. Instructional Design of National Early Grade Curriculum

Instruction design of national earl grade program (NEGRP) based on phonological awareness, graphophonemic awareness, fluency, vocabulary, comprehension and writing, teaching Nepali language based on six components of reading within the existing eight periods and actual requirement of the weightage for Nepali language instruction for early grades and justification for increasing time for Nepali language instruction.

c. Increasing Weightage for Nepali Language of Instruction

The third key theme was increasing weightage of language of reading and instruction for early grade based on the instructional design of national early grade program (NEGRP). This was elaborated by the questions related to alternative or options for increasing weightage for language of reading and instruction of Nepali language, how it can be practiced and that challenges to be faced during the practice.

6.2 Focus Group Discussion (FGD) Guidelines for Officials of DEO and School Personnel

The focus group discussion guidelines for officials of DEO and educational personnel of schools (head teacher, teacher and reading motivator) also cover the same themes that was included in FGD guidelines for CLAs. In addition to this, the following themes were also added in the FGD guidelines for DEO officials and personnel of schools.

a. Hurdles and supporting aspects for developing reading skills and reading habit of early grade children and
b. Possible ways of resolving the hurdles

6.3 Interview and Questionnaire Instruments

With a view to collecting data from a wider key informants or respondents, interview and questionnaire instruments on language of reading and instruction for early grades were

developed based on the themes mentioned above. The study team members and EGRP technical persons used these instruments for generating data from key informants or respondents of EGRP districts and schools. The data collected using either interview or questionnaire instruments are of qualitative type.

6.4 Class Observation Instrument

The purpose of the class observation instrument (COI) was to find out the actual time required for each component of reading that guides to estimate the time required for language of reading and instruction based on the six components of reading. The class observation instrument consisted of the instruction process based on the reading framework and time required for reading components namely, phonological awareness,grapho-phonemic awareness, fluency, vocabulary, comprehension and writing. The class observer rated the time required for each component that was compared with time proposed in teacher's guide to find its reality. This class observer also conducted discussion with early grade teachers to understand their concerns as well on time requirement.

7. Data Collection Procedures

The data collection procedures includes two folds: (i) Focus group discussion workshops with central level line agencies and personnel of District Education Office and school (head teacher, teacher and reading motivators) and (ii) collection of data from District Education Office and schools through interviewing, filling in questionnaire and class observation using the instrument mentioned above. The modality of the data collection procedures was as follows:

7.1 Organization of Workshop on Focus Group Discussion

EGRP organized workshop on FGD on time-table of language of reading and instruction for central level line agencies, DEO and school personnel of District Education Office of Bhaktapur district at central level. The workshop was organized separately to each group to generate data from two different sets of key informants without the influence of one group to another. The team of consultants presented FGD guidelines and ground rules of discussion. EGRP and consultants facilitated the workshop to generate data on the specific themes of the study.

7.2 Interview and Questionnaire Instrument

The team of the consultant and EGRP technical personnel of the central, district and regional office conducted interview to generate data on time-table of language of reading and instruction. In addition to this, the EGRP regional staff oriented the DEO officials and selected school personnel on the purpose of the study and provided questionnaire them to fill in. Therefore, due to limited resources to conduct workshop on FGD, data of the study were also collected through interviewing and questionnaire as well to enrich the study.

7.3 Class Observation

The technical staff of EGRP observed the classes of early grade to find out the actual time requirement for teaching using the reading framework and its six components. After class observation, discussion was held with teachers about the challenges of time management to teach early grades using the reading component framework and ways of resolving them. The observer rated the actual time use in the classroom while teaching by teachers. The observer's comments were given due importance while analysis the data.

8. Data Analysis and Interpretation

The data collected from the key informants were analyzed on the basis of the themes specified above. The key themes of the study are (i) existing early grade curriculum of CDC in terms of core subjects, weightage and their relevancy, (ii) restructuring of the existing early grade curriculum with a view to increasing weightage for Nepali language of reading and instruction (iii) Instructional design of national early grade reading program in terms of its reading components and time requirement, (iv) implementation strategy of instruction design of national early grade reading program and options or alternatives for increasing time for language of reading and instruction. The report was prepared based on the data on these key themes collected from different sources and review of the national and international research reports, articles and policy documents.

CHAPTER 3: REVIEW OF THE LITERATURE

3.1 Review of National Literatures

The national literatures includes primary curriculum published by CDC (2005), especially early grade curriculum and textbooks and curriculum prepared by NEGRP. NEGRP's educational materials includes student's exercise book, teacher's guide and other teaching learning materials and supplementary reading materials as well. The study team reviewed these materials during the course of this study. Briefly, the reviews are presented in the below sections of this chapter.

3.1.1 Primary Curriculum Development Phases

(summary of Nepali review version will be included)

3.1.2 Early Grade Reading Curriculum under EGRP

National Early Grade Reading Program has developed scope of sequences for grade 1 to 3, student's workbook, teacher's guide and teaching learning materials for early grades. In addition to this, NEGRP has provided 149 titles of supplementary reading materials to EGRP districts.

3.2 Review of International Literatures

Instructional time has been regarded as an important policy measure for improving the achievement of low-performing children. Now-a-days, instructional time has become a major and fundamental resource in education. Researchers and practitioners both emphasize the significance of instructional time for student outcomes. Additional instructional time likely has intuitive appeal for low-achieving students, and struggling students may need more time to improve learning. However, additional instructional time policies may be expensive if the additional time is not properly and efficiently used.

At present, very little has been known about the effectiveness of additional instructional time and student's performance because of availability of meager literature in the issue. In this section, effort has been made to review the experiences of the educationists and RTI, and the findings of research so as to explore whether instructional time and student's achievements correlate and instructional time explains the student's performance.

RTI's Approach to Early Grade Literacy Instruction

The paperprepared by Bulat and others (2017) for RTItries to analyze the factors that contribute to improve the early grade literacy programs in low- and middle-income (LMI) countries. The paper found that major or core elements that contribute in improving the early grade literacy instruction and learner outcomes are- the approach to teaching (Teach), the availability of quality, relevant learner materials (Text), the use of formative assessment to guide instruction (Test), and provision of instruction in the most effective language (Tongue) including the effective use of instructional time (Time).The paperstresses on the acquisition of literacy in alphabetic and alphasyllabic languages in the early primary years i. e. academic levels 1 through 3 and the kinds of exposures, instruction, and support learners need to become fully literate. The paper refers Aronson, Zimmerman, & Carlos, 1998; Wright, 2000, and signifies that the use of time available is an important factor for effective instruction; and time allocated to literacy instruction could substantially impact on improving learner's performance. Education system normally mandates instructional time: such as the length of the school day, the number of minutes allocated to teach literacy, and the amount of emphasis to put on components of literacy instruction. The study also highlights that available instructional time can be maximized by balancing the time allotted to skill development, practice, review, and assessment and maintaining a good pace of instruction. The paper puts example that after one year of instruction,students could read more words, read correctly per minutecompared with the control group in Egypt, when reading instruction is increasedby 20 to 30 minutes per dayunder the USAID-funded Girls' Improved Learning Outcomes project.

Viewpoints on instructional time allocation

- An internationally recognized educator, Timothy Shanahan (2013), and researcher recommend 2 to 3 hours of literacy instruction per day through Grade 5.

- The Florida Center for Reading Research (2009) recommends 90 minutes of literacy instruction for schools with a large proportion of learners at risk for reading difficulties; this time should be adjusted as needed to meet the changing needs of learners.

- Cunningham & Stanovich, (1998) maintained that the consensus is that the more time learners are exposed to reading, the better the learning outcomes will be.

As regards the time allocation to literacy instruction,the paper includes researchers and practitioners' viewpoint such as sufficient time must be allocated and this time must be effectively used, however, the research has not converged on an ideal amount of time for literacy instruction, either during a school day or an academic year.

Working with Ministries to review the amount of time allocated to reading/literacy acquisition (and mathematics where relevant), RTI experienced that

- increase in the amount of time as much as possible during the school day is necessary
- teachers might find additional time during the day for independent practice
- schools can work with parents and families to encourage additional reading practice time at home where the amount of time for literacy instruction during the school day could not be increased
- time needs to be allocated across activities to develop, reinforce, and measure component literacy skills.

RTI found the following approaches to be effective regarding time allocation and relative literacy skill:

- Literacy time should be divided across the five components of reading, story reading, syllable/ word work, writing, review, and assessment, but the time should not necessarily be divided equally across these skills and activities.
- Phonological awareness instruction is limited to 10 minutes a day, and even smaller increments of 2 minutes per activity is given for this instruction.
- Other skills, such as word work, comprehension, and vocabulary are allotted more time, especially as learners master more fundamental skills.
- Relative allocation of time can vary over a week. Each day should include some type of lesson introduction and conclusion activity while in Fridays time is often dedicated to reviewing and consolidating the week's work, and work on specific skills that can occur so as to ensure that sufficient time during the week is allocated to developing each skill.
- Relative allocation of time should shift during an academic year and from one year to the next to ensure that the skills could be reinforced in later years without the same level of explicit instruction. In indigenous languages, such as some in Nepal and Ethiopia, with a particularly large number of symbols, full mastery may extend into the second year of instruction. Similarly, phonological awareness and letter knowledge often receive greater emphasis at the beginning of the first year of instruction, with time allocated to these skills decreasing over the year as learners gain mastery.
- Comprehension can be integrated into other activities or separated into its own allotted time, however, RTI encourages allocating specific time to reading and comprehension activities, in addition to building in opportunities to read and develop comprehension skills through other activities. Such specific time allocations allow the teacher to observe these activities and ensure they take place.
- Time should be allotted to transition between activities.
- Time should be allotted during a week or a unit to review the content covered during that week or unit with learners and to monitor learners' mastery of that content.

Impact of Instructional Time on Test Scores

Lavy (2015) attempts to explain the relationship between instructional time spent in school and educational productivity in terms of achievement score .Attempt .was made to estimate the effect of instructional time on student's achievement by using PISA 2006 data, that includes data samples from 50 countries of 15-years old Children.

The articles also reviewed some of the previous works on the issue of instructional time and educational productivity, and showed that instructional time explained the performance of students.

> **Previous work on instructional time**
>
> - Lee and Barro's study (2001) shows the instructional time and test score correlates.
> - Hansen (2008) reports that more instructional time due to fewer snow-related school day cancelations and delayed testing increased student's performance in Colorado and Maryland.
> - Dobbie and Fryer (2011) found that Charter School in New York City that add 25% or more instructional time have an annual gain of 0.059 of a standard deviation in mathematics. Fryer (2012) reports similar size effects of instructional time in Houston public schools.

Lavy showed that instructional time has a positive and signification effect on the academic achievement of students. On an average, one-hour increase per week in maths, science or language instruction raise the test score in these subject by 0.06 of a standard deviation of the distribution of test-scores .The effect of the instructional time in larger for girls, immigrants and pupils belong to low socio-economic conditions. The result is similar to former Soviet Eastern European countries to the average effect obtained from the OECD developed countries. However, the effect on test score is much lower for developing countries, i.e.0.0255 of a standard deviation of test score distribution. Lavy further showed that effects of instructional time on PISA test score are all positive, very large and always significant.However, the effect is larger in science compared to maths and language. Effect on language is much lower.

Lavy concludes that the effect of additional instructional time on academic achievement has positive and significant. He suggests that cost relative to other beneficial inputs should be taken into account when the merits of additional instructional time are considered as policy input. Moreover, the accountability measures and teacher's absenteeism issues need to be considered while adding instructional time in developing countries, since the additional instructional time has not as much effect in developing countries as in the developed ones.

Linkage between Instructional Time and Achievement

Rivkin and Schiman (2016) attempt to analyze relations between the instructional time and student's achievement. Even though research generally supports the notion that additional time raises achievement, an exogenous source of variation raise questions about the strength of the evidence. In this paper, panel data methods are used to investigate the pattern of instruction time effects in the 2009 Programme for International Student Assessment (PISA) data.

The empirical analysis of Rivkin and Schiman provides strong evidence in favor of the notion that additional time raises achievement using a series of specifications and measures of instructional time. Given the character of the deficiencies of the two fixed effects models, the results suggest that the effect is positive and modest in magnitude on average. Although instructional time is found to exhibit diminishing returns, the rate of decrease appears to be quite gradual.

Rivkin and Schiman conclude taht the benefit of additional instructional time appears to vary with the quality of the classroom environment. The results produced by both specifications show that schools with low quality classroom environments likely realize little or no benefit from additional instruction time. On the one hand, it does not appear that schools can compensate for poor environments with additional time. If anything, additional time might be expected to degrade further the quality of the classroom environment as it becomes more difficult for students to sit and listen. On the other hand, there would appear to be substantial complementarities between policies that improve the classroom environment such as the strict discipline demanded schools and those that expand instruction time. Thus these results are consistent with the large benefits found for attendance at KIPP Academy charter schools. In contrast, the estimates provide little or no evidence of a relationship between the return to additional instruction time and the quality of instruction. Yet given the absence of direct measures of teacher quality, class size, and other established determinants of the quality of instruction, this finding may simply reflect the weakness of the quality of instruction measure.

As it seems likely that the magnitude of any causal link between achievement and instruction time depends upon the quality of instruction, the classroom environment, and the rate at which

students translate classroom time into added knowledge. The analysis shows that achievement increases with instruction time and that the increase varies by both amount of time and classroom environment. These results indicate that school circumstances are important determinants of the likely benefits and desirability of increased instruction time.

Instructional Time and Productivity

Cattaneo and others (2016) also analyze effectiveness of the use of instructional time, and show the effects of variations in subject-specific instruction time on student test scores, mainly originating from variations in the number of lessons taught per week. However, instruction time varies considerably due to differences in the duration of lessons, the number of school weeks or even the number of school years. In the paper, the impact of cumulative instruction time (weekly or yearly) on student test scores is analyzed by using the PISA data in the context of Switzerland.

The results show exactly the same coefficient for Switzerland as in Lavy when using the self-reported data on school hours but a significantly smaller coefficient when the official cantonal data are used: 0.046 standard deviations instead of 0.058. When a back-of-the envelope calculation used for comparing the effect of an average hour of instruction with the effect of an additional hour of instruction, it revealed that an additional hour has only between a third and two fifths of the effect of an average hour on PISA scores. According to the OECD, an average student should progress by 42 PISA points per year of schooling, but a Swiss student, on an average, had 3.4 hours of subject specific weekly schooling. The results indicate that only a gain of between 4.2 and 5.3 PISA points for an additional hour of instruction.

The efficiency of one extra hour of instruction for pupils with different academic abilities and school environments is not the same. One hour of instruction has the same productivity for all subjects, however, different students profit differently from extra instructional time. Results show that one additional hour of instruction has a significantly higher effect for pupils in more demanding types of school. As pupils in lower-level tracks might indeed have lower learning capabilities, and the inputs in the different tracks might be different, so different students may gain differently. It also indicates that returns to additional time depend on the quality of learning environment, and on the quality of teachers and schools. Thus, effect of additional instructional time on student's performance in the school and within the school varies.

The analysis shows that one additional hour of instruction per week increases the PISA score by between 0.05 and 0.06 standard deviations. However, the returns of one additional hour vary greatly by school track. For students attending schools with advanced requirements, one extra hour of instruction increases the PISA score by between 0.07 and 0.08, while the increase in PISA score is only approximately 0.04 for students in tracks with basic requirements. These differences can be the consequence of many factors, such as different school environments, different teachers' attitudes, or different behavioural aspects, such as school discipline. However, the differences in effectiveness of instructional time can also be the consequence of differences in pupil aptitude (time needed to learn). If this is the case, then pupils with different abilities benefit to different extents from additional instruction time. The results point in this direction, as we can show that additional instruction time also increases the within-school and subject variance of test scores.

Adaptive Instruction and Pupil's Achievement

The research article prepared by Hautveen and others (1999) reports the result of a quasi-experimental design on the effects of adaptive instruction on reading result of children in the first year of reading instruction in Dutch primary schools. The experiment includes 456 students from 23 schools. Teacher in experimental groups shows significantly higher adaptive instructional behavior such as optimizing time on task,use of the model of direct instruction,work on the principles of phonics construction method for initial reading, diagnostic teaching and the like. The children of the experimental group were significantly successful on the attainment of higher reading result compared to that of control group.

The experiment considered instructional time and its efficient use important, so instructional time was also included as a variable including time-on-task in adaptive instruction. Twenty minutes of reading lesson were used to monitor the amount of time the teacher and students actually used in the activities of subject matter.

The result shows that adaptive instruction significantly improved the reading score.Even though instructional time has also effect on reading,however,it was not as significant as other variable in both experimental and control group.

Differential Effects of Additional Instructional Time

A *Panel Paper: Who Benefits from Additional Instruction Time? Evidence from Florida's Additional Hour of Literacy Instruction* presented by Ozek and others (2017) made attempt to show whether additional instructional time has impact on student's performance. Particularly, the paper analyzes differential effects of additional instruction time along a multitude of student characteristics including student poverty, gender, race/ethnicity, nativity, and language spoken at home as well as maternal characteristics such as maternal education, mother's marital status, mother's age during pregnancy, and mother's place of birth with the use of regression discontinuity framework.

The paper reveals that there is significant benefit of additional instruction time on reading test scores. In particular, regression discontinuity estimates suggest that students enrolled in schools whose reading accountability scores fell right below the AIT cutoff score roughly 0.03σ to 0.09σ better in reading compared to students enrolled in schools on the other side of the cutoff. The differences in reading achievement correspond to approximately 1 to 3 months of learning. However, there are no significant discontinuities in math performance at the AIT cutoff. The paper also finds that the effects of additional instruction time vary considerably across student subgroups, with the benefits on reading achievement mainly concentrated among students from disadvantaged backgrounds. For example, additional instruction increases reading achievement by 0.07σ for persistently poor students, by 0.05σ for students whose mothers has a high school degree or less, and by 0.10σ for students whose mothers were teenagers when the student was born, while there is no significant effects for students from more advantaged backgrounds.

Conclusion

Though research in the instructional time for early grade reading has been little conducted, thereview shows that additional instructional time has impact on the productivity of educational system. Increase in the instructional time naturally improves the performances of the children; however, the increase in the test score in reading is not at par with that of the mathematics and science. Although additional instruction time increases the test score, it has differential effect for

children of various socio-economic conditions. Moreover, the effect of additional instructional time is less in developing countries compared to developed ones.The review also emphasizes that the increase in instructional time needs to be divided for various components of the reading.

Furthermore, the review indicates that the additional instruction time alone could not help in improving the performance of children. To get expected result from additional instructional time policy, quality aspects such as classroom and school circumstances, accountability and teacher's absenteeism, etc must be considered.

4   Paradigm Shift of Early Grade Reading Curriculum

The reading framework used by NEGRP early grade has developed teaching learning materials for early grade children. This has been a new initiative for reading and instruction of Nepali. This will provide new opportunity of learning for children compared to the early grade curriculum of Nepali. This is a new approach for teaching Nepali in a holistic approach.

CHAPTER 4: DATA PROCESSING, ANALYSIS AND INTERPREATION

Focus Group Discussions (FGDs) were conducted among primary stakeholders of school education system. The participants were mainly head teachers, teachers teaching in early grades (G 1-3), school supervisors, resource persons, reading motivators and focal persons of Bhakatpur District, one of the EGRP districts. There were three Government officials representing from Curriculum Development Centre (CDC) and Department of Education as observer in the workshop. There were altogether thirty-five participants in the workshop. Five homogeneous groups were formed on the basis of their jobs and experiences. The main objective of the FDG was to get in-depth information regarding time-table for language of reading and instruction in early grades. The FDG covered the following seven themes that are:

1. Analysis of the existing early grade curriculum (CDC, 2005)
2. Provision of local subject/mother tongue in existing early grade curriculum
3. Restructuring of subjects and weightage in existing early grade curriculum
4. Instruction design of national early grade program (NEGRP)
5. Use of instructional design in EGRP schools
6. Management of time-table/weightage per week for language of reading and Nepali language instruction to NEGRP instruction design in school
7. Hurdles and supporting aspects for developing reading skills and reading habit of children

In this section, the data gathered from FGD have been categorized, analyzed and interpreted on the above main themes.

5.1 Analysis of Existing Early Grade Curriculum (2005)

The curriculum of early grades (G 1-3) includes six core subjects that are Nepali, English, Mathematics, Social Studies and Creative Arts, Science, Health and Physical Education, and local subject/mother tongue with different weightages but equal full marks of Early Grade Curriculum which is given in the table below:

Table 1: Distribution of Subjects, Weightage and Full marks

SN	Subject	Weightage	% of Weightage	Full Marks
1.	Nepali	8	23	100
2.	English	5	15	100
3.	Mathematics	6	18	100
4.	Social Studies and Creative Arts	6	18	100
5.	Science, Health and	5	15	100

	Physical Education			
6.	Local Subject/Mother Tongue	4	11	100
	6 Subjects	**34**	**100**	**100**

5.1.1 Weightage of Instruction

As the subject and weightage reveal an important scenario for reading and instruction of Nepali language. The teaching period allocated to Nepali language per week is 8 periods that includes 360 minutes (6 hour/week). The key informants examined the above scenario with a view to finding more time for instruction of Nepali language. They concluded the following justification regarding the above scenario:

The key informants added that Nepali language as the national language that is spoken by the majority of Nepalese population. The development of reading skills and habit of children is essential by increasing instruction weightage for Nepali. They concluded that there is need of more time for reading and instruction of Nepali language.

Nepali language is the basic language and medium of instruction for other three subjects namely, Mathematics, Social Studies and Creative Arts and Science, Health and Physical Education. They mentioned that instruction time for Nepali requires more that would help to learn other subjects. Furthermore, the workshop participants concluded that while teaching these subjects, the provision of learning of Nepali language can be made. This provision will facilitate for developing children's reading skills and habit. However, they indicated that intensive training for teachers should be provided to bring into practice this provision.

The key informants felt that the weightage of other subjects in the early grade curriculum is appropriate compared to Nepali language. So, the reduction of weightage of other subject to increase the instruction time of Nepali will not be feasible. This effort will cause subjects competition and conflict which will make difficult to manage as well.

5.1.2 Relevancy of Six Subjects

The Early Grade Curriculum (2005) consists Nepali language, English, Maths, Social Studies and Creative Arts, Science, Health and Physical Education and local subject or Mother tongue. Regarding the relevancy of these subjects, the key informants mentioned that these subjects are necessary for early grades. Nepali is required for developing reading skills and reading habit and a common language of instruction for other subjects. Maths is necessary for developing mathematical skills as foundation for mathematics. English as international language which is needed for global society. Social studies is required for cultivating socialization skills and developing innate capabilities and sciences is for basic understanding of nature and environment.

Regarding the relevancy of local subject/mother tongue, the key informants emphasized the need of its provision for promotion of local cultures and values. However, they added that the provision of teaching local subject/mother tongue has not been properly utilized being lack of the technical support to schools. The schools needs technical support to develop curriculum and materials for local subject and mother tongue. There is lack of required teachers to teach local preferred subject and mother tongue as well.

5.1.3 Equal Full Marks and Weightage

The full marks for all six subjects were 100 which is allocated with a view to an assessment purpose. The key informants felt that weightage was assigned to the subjects on a priority basis. They added that the current subjects contribute in developing content knowledge and skills of the subject offered. They recommended that the following for proper adjustment of subjects, weightage and full marks for the early grades:

The key informants concluded that the development of integrated curriculum would be better to balance contents of the subjects, weightage and marks.
The key informants realized the weightage allocated for the instruction of Nepali language is not sufficient as Nepali play a crucial role in learning Nepali and other core subjects as well. This indicates that Nepali language should be in top priority in early grade curriculum either curriculum is developed by single subject or integrated subject approach.

The current reading framework consisting of phonological awareness, grapho phonemic awareness, fluency, vocabulary, comprehension and writing which is in an integrated form. The existing time 45 minute per period is not adequate to teach the lessons designed under this framework. Thus, there is need of 90 minutes for the instruction of Nepali language designed by EGRP.

5.1.4 Challenge and Solution

The key informants pointed out some challenges and solutions related to reading and instruction of Nepali.

Challenge

The key challenges are inadequate weightage, existence of double textbooks (e.g. Mero Nepali and TLM of EGRP), difficult to teach children having Nepali as second language, lack of appropriate teaching materials, lack of proper assessment of student's learning and lack of competent teachers for teaching Nepali.

Solution

The key informants' suggestions were necessity to give priority on reading and instruction of Nepali, advocacy is necessary for developing reading skills and promotion of reading culture, needs for allocation of more weightage for Nepali, needs for replacing Mero Nepali book, requirement of teaching materials related to the contents and necessity to improve assessment process of early grades.

5.1.5 Subject Adjustment and Priority

The key informants strongly mentioned that there is need of subject adjustment, especially focusing instruction of Nepali language and English in early grade curriculum. There is demand of instruction of English in early grade as well. Thus, it is necessity to increase weightage for Nepali and English languagesin early grade curriculum. The better learning of these languages would help the children to learn Mathematics, Social Studies and Creative Arts, Science, Health and Physical Education. Thus, priority should be given the instruction of Nepali and English languages.

Some of the schools might not be interested to teach local subject/mother tongue. In such case, the provision should be made that School Management Committee (SMC) can merge such

weightage with the weightage of Nepali or English language instruction. This adjustment would help the students to develop their reading skills and habit in their early age.

5.1.6 Weightage Adjustment of Subject

The existing early grade curriculum (2005) has made a provision of 8 periods per week for the instruction of Nepali language. The time for each period is 45 minutes so that total time (in minutes) per week in 360 minutes which is equivalent of 4 periods of 90 minutes. The key informants suggested to make 10 periods (each period/45 minutes) per week adding 2 additional periods. Then total time per week for the instruction of Nepali language will be 450 minutes that will make a provision of 5 periods of 90 minutes. The full marks of Nepali language could be exceeded to 150 marks.

Parents have been demanding to teach English in school due to its global market and linkage with learning of other subjects. English language is in priority of most people in Nepal due to its internationally recognition. Youngsters are attracted to get higher studies abroad for which English language is basic requirement. Without the provision of the instruction of English, there is the question for survival of the community schools. To address this concern, the existing 5 periods per week (each period of 45 minutes) of English needs to be increased to 7 periods per week. The school management Committee (SMC) should decide either to make 45 minute period or 90 minute period within the available total weightage for better and continued learning of children.

5.2 Provision of Local Subject/Mother Tongue in Existing Early Grade Curriculum

The existing Early Grade Curriculum (CDC, 2005) has made a provision of 4 periods per week (each period of 45 minutes) for local subject or mother tongue. Due to mismanagement of local subject or mother tongue, the schools have not been managing this provision properly due to lack its proper understanding and unavailability of technical support to the schools. Therefore, the schools are using the given periods for local subject or mother tongue in their own way.

5.2.1 Selection of Local Subject and Mother Tongue

Regarding the use of the provision of local subject or mother tongue, the key informants mentioned that the schools have not utilizing this provision properly due to the following reasons:

- Lack of local curriculum and textbook, and teachers for teaching local subject
- As the composition of students in classroom consists of multi-ethnicity, the instruction of mother tongue is not in practice in schools.
- Unavailability of trained teachers either teaching selected mother language or local subject.
- Lack of technical support to school for planning and teaching local subject or mother tongue.

5.2.2 Use of the Allotted Periods for Local Subject and Mother Tongue

The key informants reported as follows about the use of allotted periods for local subject/mother language in the schools:

- Schools are using 4 periods of local subject or mother tongue in teaching English, Mathematics, general knowledge, and extra-curricular activities. Generally, they found that the schools and parents are not interested in teaching local subject

- The community schools are in competition with private schools so that they use such periods in teaching English and Mathematics or other subjects as per their need.
- The schools do not have trained human resource to develop the curriculum and learning materials of local subject that caused them to use such periods to teach other subjects.
- Almost all schools are using the4 periods assigned for local subject for other purposes such as teaching English or Mathematics or General Knowledge.

5.2.3 Suggestion for effective use of the Periods allocated to Local Subject and Mother Tongue

The key informants suggested the ways for effective practice of teaching local subject or mother tongue:

- The schools should manage the provision of local subject to teach those subjects which are relevant to the students at local context.
- The local key stakeholders should be active to support schools in developing the curriculum and materials of local subject and teaching mother tongues.
- The SMC should make available qualified and trained teachers for teaching local subject and mother tongues by making availability of local resources.
- There is possibility of using 2 periods of local subject out of 4 periods for the instruction of Nepali language. The remaining two periods could be used for instruction of any subject that is relevant at local level.

5.3 Restructuring of Subjects and Weightage in the Existing Early Grade Curriculum

For restructuring of subjects and weightage in the existing early grade curriculum, the key informants expressed different views and reasons. In overall, their priority weightage for Nepali was at least 10 periods and preference was 12 periods per week. They felt that there is need of more time for effective learning of Nepali and students have to be engaged in learning activities in classroom under the guidance of teacher. This demands more teaching time for Nepali and that should be happen continuously in classroom for active learning so that the existing provision of the 45 minutes in ongoing CDC early grade curriculum is not favourable to achieve this objective.

The key informants expressed that English subject being recognized an international language, parents highly demand English and frequently request schools to make English as a medium of instruction. Therefore, they suggested for making provision of 7 periods weekly (45 minutes/period) for English as well.

The key informants suggested for providing 6 periods weekly for Mathematics to make a strong foundation in the early grades. They suggested for integration social studies and local subject making the provision of 10 periods per week. For science and HPE and creative arts, they suggested 5 and 4 weightage respectively.

5.4 Instruction Design of National Early Grade Reading Program

The National Early Grade Reading Program developed scope and sequence, teacher's guide, instructional materials and student's workbook under the reading framework that consists of Phonological awareness,grapho-phonic awareness, fluency, vocabulary, comprehension and writing. The key informants expressed that in existing situation it is impossible to teach the students of early grades using these materials in 45 minutes. The reasons they presented are the following:

- Inadequate time for effectiveness in students' reading skills
- Inadequate time for teaching activities according to planned lesson
- Inadequate time for continuous evaluation and remedial teaching

Basically, all the key informants agreed to make 90 minutes per period on weekly basis. This demands 10 periods (450 minutes) weekly. In existing situation, 2 periods from local subject could be adjusted to Nepali language otherwise daily school hour needs to be exceeded to the current school time (1500 pm.

5.5 Use of Instructional Design in EGRP

It was found that in the existing situation the most of schools have been trying to manage 90 minutes the instruction of Nepali for early gradesusing the teaching materials developed the NEGRP.

It was found that in the field visit most of the schools in Bhaktapur districts have managed 90 minutes for the instruction of Nepali by using allotted periods for local subject, using lunch break time and school off time and also reduced periods into 40 minutes from 45 minutes of other subjects.

The key informants mentioned that that there is adequate use of materials as per the lesson and helped to develop the reading skills and habit of children which has increased contributed to increase their performance in Nepali and other subjects as well.

The existing TLM and provision of 90 minutes has made teaching learning activity oriented and has facilitated to learn the contents easily. This has made the teaching effective to learn Nepali language. There is a strong recommendation of the key informants that at least 75 to 90 minutes requires for achieving the goal reading.

5.5.1 Challenges related to Time Management

They described their experiences regarding the management, which is beneficial to the learners however there are more challenges which demand solutions. These are the following:

- Classes are run by untrained teachers
- Difficulty in managing time
- Difficulty in teaching allocated lesson plan
- NEGRP trained teachers have to take other classes
- Lack of space in the classroom to keep instructional materials
- Problematic increased number of students' migration

- Poor management from policy level

5.5.2 Suggestion for Resolving the Challenges

- Classes should be given to trained teachers.
- Lunch break, teaching hours, and period time should be managed.
- Besides Nepali teachers, other teachers also should be trained.
- Needs to request with SMC for appropriate management of TLMs/SRMs
- Trained teacher need to be motivated and increase number of teachers
- Interaction with parents for retention of students and supporting to read at home.
- Needs for increasing weekly weightage up to 36 periods.
- Each period needs minimum 75 minutes for the instruction of Nepali language.
- Reduce other subjects for early grades by integrating the core contents

5.6 Time-Table/Weightage Management for Reading and Instruction of Nepali Language

The alternatives to increase teaching time for Nepali language suggested by the key informants are:

- Curriculum needs to be revised as soon as possible
- Weightage for Nepali language teaching should be made at least 10 hours per week
- Increase weekly weightage up to 36
- Each period needs at least 75 minutes for Nepali language

5.7 Hurdles and Supporting Aspects for Developing Reading Skills and Reading Habit of Children

Hurdles

The main hurdles for developing the reading skills and habits of early grade children are lack of understanding the need of more time for the instruction of Nepali language, only a few teachers are trained in NEGRP reading framework, not clear instruction for time management, provision of two books (Mero Nepali and TLMs) and lack of proper orientation to the school management

Supporting Aspects

The supporting factors for developing reading skills and habit of early grade children are priority on the instruction of Nepali language using teaching and learning materials, trained teachers of Nepali, availability of teaching learning materials, provision of reading competition, effort to mobilize parents and community in teaching and learning process and provision of reading motivators in schools.

CHAPTER 6: SUMMARY OF FINDINGS

The key findings of the study include the following:

1. In accordance with the early grade curriculum (CDC, 2005), the teaching period allocated to Nepali language per week is 8 periods that includes 360 minutes (6 hour/week). Nepali language as the national language that is spoken by the majority of Nepalese population. In this context, there is need of more time for reading and instruction of Nepali language for early grades.

2. Nepali language is the basic language in early grades and medium of instruction for other three subjects namely, Mathematics, Social Studies and Creative Arts and Science, Health and Physical Education. They mentioned that instruction time for Nepali requires more that would help to learn other subjects as well. Furthermore, the key informants concluded that while teaching these subjects, the provision of learning of Nepali language can be made. This provision will facilitate for developing children's reading skills and habit. However, they indicated that intensive training for teachers on this approach should be provided to teachers to bring this provision of learning Nepali during the course of teaching other subjects.

3. The existing early grade curriculum (2005) has made a provision of 8 periods per week for the instruction of Nepali language. In overall, it was found that there is need of providing at least 10 periods though the preference is for 12 periods per week. They felt that there is need of more time for reading and instruction of Nepali. For effective learning, there is need of students' active engagement in learning activities in classroom under the guidance of teacher. This demands more continued instruction time for Nepali for active learning so that the existing provision of the 45 minutes per period in the ongoing CDC early grade curriculum is not favorable to achieve this objective.

4. The existing early grade curriculum (2005) has made provision of 8 periods per week for the instruction of Nepali. The time for each period is 45 minutes so that total time per week in 360 minutes which is equivalent of 4 periods of 90 minutes. There is possibility of making the instruction period of Nepali 10 periods (45 minutes/each period) per week by adding 2 additional periods that can be adjusted from the local subject or mother tongue. Then, the total time per week for the reading and instruction of Nepali will be 450 minutes that will make a provision of 5 periods of 90 minutes for early grades. In addition of time, the full marks of Nepali language could be exceeded to 150 marks that would help to just the increment of weightage.

5. The weightage allocated for the instruction of Nepali language is not sufficient as Nepali play a crucial role in learning Nepali and other core subjects as well. This indicates that Nepali language should be in top priority in early grade curriculum either the development of the curriculum takes place through subject approach or integrated subject approach.

6. The current reading framework of the National Early Grade Program (NEGRP) consists of phonological awareness, grapho phonemic awareness, fluency, vocabulary, comprehension and writing which stands in a holistic teaching approach. The provision of the 45 minute per period in the existing CDC early grade curriculum is inadequate to teach the lessons designed under this framework by NEGRP. Thus, there is need of fixing the instruction time within the periphery of 90 minutes for reading and instruction of Nepali in early grades.

7. The development of integrated curriculum for early grades would be better to balance the content load of the subjects, weightage and marks with a view to developing reading skills and habit of early grade children.

8. There is need of subject adjustment, especially focusing the instruction of Nepali language and English in early grade curriculum. There is demand of instruction of English in early grade as well. Thus, it is necessity to increase weightage for Nepali and English languages in early grade curriculum. The better learning of these languages would help the children to learn Mathematics, Social Studies and Creative Arts, Science, Health and Physical Education. Thus, priority should be given the instruction of Nepali and English languages.

9. There is not proper use of the provision of local subject or mother tongue. So, some of the schools might not be interested to teach local subject/mother tongue. Therefore, out of the 4 periods for local subject or mother tongue, there is possibility of using 2 periods for instruction of Nepali language. The remaining two periods could be used for instruction of any subject that is relevant at local level. In such case, the provision should be made that School Management Committee (SMC) can merge such weightage with the weightage of Nepali or English language instruction. This adjustment will provide more time to the students to learn Nepali and would help them to develop their reading skills and habit in their early age.

10. Parents have been demanding to teach English in school due to its global market and linkage with learning of other subjects. English language is in priority of most people in Nepal due to its internationally recognition. Youngsters are attracted to get higher studies abroad for which English language is basic requirement. Without the provision of the instruction of English, there is the question for survival of the community schools. To address this concern, the existing 5 periods per week (each period of 45 minutes) of English needs to be increased to 7 periods per week. The school management Committee (SMC) should decide either to make 45 minute period or 90 minute period within the available total weightage for better and continued learning of children.

11. The key informants expressed that English subject being recognized an international language, parents highly demand English and frequently request schools to make English as a medium of instruction. Therefore, they suggested for making provision of 7 periods weekly (45 minutes/period) for English as well. The key informants suggested for providing 6 periods weekly for Mathematics to make a strong foundation in the early grades. They suggested for integration social studies and local subject making the provision of 10 periods per week. For science and HPE and creative arts, they suggested 5 and 4 weightage respectively.

12. Some of thekey challenges observed during this study are inadequate weightage for the instruction of Nepali, existence of double textbooks (e.g. Mero Nepali and TLM of EGRP), difficult to teach children having Nepali as second language, inadequate appropriate teaching materials, lack of competent teachers for teaching Nepali and lack of proper assessment of student's learning.

13. With a view to giving priority on reading and instruction of Nepali, some of the activities should be initiated that are advocacy for developing reading skills and promotion of reading culture and orientation on the need of developing reading skills and habits of children for School Management (SMC) and Parents' Teacher Association (PTA). This will encourage SMC and PTA to lobby for allocation of more instruction time for Nepali.

14. There is need of finding out the way for replacing Mero Nepali Book by the NERGP's TLMs that would also facilitate the effective use of available time for the reading and instruction of Nepali.

15. The main hurdles for developing the reading skills and habits of early grade children are lack of understanding the need of more time for the instruction of Nepali language, only a few teachers are trained in NEGRP reading framework, not clear instruction for time management, provision of two books (Mero Nepali and TLMs) and lack of proper orientation to the school management

16. It was found that in the existing situation, the most of schools in Bhaktapur have been trying to manage 90 minutes for the instruction of Nepali for early grades using the teaching materials (TLMs) developed the NEGRP.

17. The schools in Bhaktapur district have managed 80 to 90 minutes for the instruction of Nepali by using allotted periods for local subject, using lunch break time and school off time and also reducing the time of 45 minutes of other subjects to 40 minutes

18. The existing TLM and provision of 90 minutes has made the instruction of Nepali activity oriented and facilitated the students to learn the contents faster. Furthermore, it has helped the students to develop their reading skills and habit which contributed to increase their performance in Nepali and other subjects as well.

19. There is a strong recommendation of the key informants that at least 75 to 90 minutes requires for achieving the goal reading.

20. The supporting factors for developing reading skills and habit of early grade children are priority on the instruction of Nepali language using teaching and learning materials, trained teachers of Nepali, availability of teaching learning materials, provision of reading competition, effort to mobilize parents and community in teaching and learning process and provision of reading motivators in schools.

21. Though research in the instructional time for early grade reading has been little conducted, thereview shows that additional instructional time has impact on the productivity of educational system in terms effective learning and increasing the performance of students in Nepali and other subjects as well.

22. The review indicates that the additional instruction time alone could not help in improving the performance of children. To get expected result from additional instructional time policy, quality aspects such as classroom and school circumstances, accountability and teacher's absenteeism, etc must be considered.

23. The increase in the instructional time naturally improves the performances of the children; however, the increase in the test score in reading is not at par with that of the mathematics and science. Although additional instruction time increases the test score, it has differential effect for children of various socio-economic conditions.

24. Moreover, the effect of additional instructional time is less in developing countries compared to developed ones. The review also emphasizes that the increase in instructional time needs to be divided for various components of the reading to make more systematic though it would not be exact time assignment.

Focus Group Discussion Guidelines for Participants

1. Existing Early Grade Curriculum (2005)

The curriculum of early grades (Grades 1 -3) of the existing primary curriculum (2005, CDC) consists of the following core subjects and weightage per week:

SN	Subject	Weightage	% of Weightage	Full Marks
1.	Nepali	8	23	100
2.	English	5	15	100
3.	Mathematics	6	18	100
4.	Social Studies and Creative Arts	6	18	100
5.	Science, Health and Physical Education	5	15	100
6.	Local Subject/Mother Tongue	4	11	100
	6 Subjects	**34**	**100**	**100**

Questions based on the above table for Discussion

1. How do you feel about the subjects and weightage distribution for early grades (Grades: 1-3) in the existing primary curriculum (2005)? (see above table).

1.1 What would be the basis or justification for the subjects and weightage distribution in the existing early grade curriculum as mentioned in the table above?

1.2 Are the subjects namely, Nepali, English, Mathematics, Social Studies and Creative Arts, Science, Health and Physical Education and Local Subject/Mother Tongue specified in the early grades relevant to early grades? If not, suggest the alternative options.

1.3   Though full marks for all subjects is equally distributed in the existing curriculum, the distribution of weightage varies with subjects. To what extent this distribution of the weightage is appropriate to early grades in developing their knowledge and skills of the subject? If you feel not adequate for developing their knowledge and skills, please suggest options for better learning.

1.4   What the challenges have you been facing to teach children on the basis of the existing early grade curriculum mentioned in the table above?

1.5   To what extent the weightage assigned to Nepali language in the existing curriculum (2005) is relevant to develop the reading skills and knowledge of lower grade children?

1.5.1   If the weightage assigned to Nepali language in the existing curriculum is appropriate, what are the justifications?

1.5.2   If the weightage assigned to Nepali language is inappropriate, what types of improvements would you like to propose, discuss on the following points?
(a)   Subject adjustment and fixing their priority
(b)   Weightage adjustment to the subject
(c)   Other options

2.   **Provision of local subject/mother tongue in existing early grade curriculum (2005)**

There is a provision of local subject/mother tongue of **4 periods/weekly** for early grades in the existing curriculum. School Management Committee can decide what subject/mother to teach students as per local need.

2.1   What subjects have been chosen as local subject/mother tongue? What are the reasons behind that?

2.2   If local subject/mother tongue has not been in practice in school, how the provision of **4 periods** are being used in schools? Why was such step taken?

2.3   What should be done to implement the provision of local subject/mother tongue effectively in schools?

2.4   To what extent, it is possible to use the teaching periods of local subject/mother tongue to teach Nepali language to develop reading habit of children?

3.   Restructuring the Subjects and Weightage of the existing Early Grade Curriculum (2005)

3.1   How can be the existing early grade curriculum (2005) restructured with a view to increasing teaching weightage for Nepali language to develop the reading habits of early grade children? Fill in the table below:

SN	Subject	Weightage	Full Marks	Justification
1.				
2.				
3.				
4.				
5.				

4.   Instruction Design of National Early Grade Program (NEGRP)

NEGRP has developed scope and sequence, teacher guides and student's exercise book for early grades under the following framework for reading skills and habit development of children.

1.   Phonological awareness

2.   Graph phonemic awareness

3.   Vocabulary

4. Fluency

5. Comprehension

6. Writing

4.1 With a view to developing reading habit of children under the above framework, to what extent it is possible to teach Nepali language in 8 periods/weekly as provided by the existing curriculum (2005)? Discuss on the following points:

    (a)   If it is possible, how? Explain.

    (b)   If not, why? Explain.

4.2 How can you manage the teaching of Nepali language for developing reading skills and habit of children using the above mentioned framework? Suggest the strategy.

5. Existing Practice of Instruction Design of National Early Grade Program (EGRP) in Schools

NEGRP developed scope and sequence, teacher guides and student's exercise book for grades 1 to 3. The schools in your district have received these materials since last year. However, the teaching periods of Nepali Language instruction in the existing curriculum remains **8 periods/weekly**. This means that the teaching periods of Nepali language instruction has not been changed yet.

5.1 While teaching the students using the NEGRP materials (teacher guide, student's work book etc.) in the above timeframe **(8 periods/weekly),** please explain your experiences based on the following:

    (a)   Lessons learnt
    (b)   Challenges
    (c)   Resolving challenges

5.2 In the above context, how are you managing the teaching periods for Nepali Language in schools to use early grade reading materials provided?

6. Increasing Teaching Periods for Early Grades based on the Instruction Design of the Early Grade Program (EGRP)

For developing the reading habit of early grade children using the instructional design and materials (e.g. scope and sequence, teacher guides and student's exercise book), there is need of increasing teaching period for Nepali Language instruction.

6.1 In the above situation, what would be the alternative/strategy for increasing teaching periods of Nepali Language Instruction for early grades?

7. Supporting factors for developing Reading habits of early grade children

7.1 What are the hurdles that affect reading habits of early grade children? Why? How these can be resolved to make an enabling environment for developing children's reading skills and habit.

SN	Hurdles	Why?	Ways of Resolving them
1.			
2.			
3.			

7.2 What are the supporting factors for developing reading skills and habits of early grade children? How can we bring them in practice?

SN	Supporting Factors	Ways of implementing supporting factors
1.		
2.		
3.		

Themes for Focus Discussion Group with Central Level Line Agencies (CLAs)
(Proposed)

2. **Existing Early Grade Curriculum (CDC, 2005)**

The curriculum of early grades (Grades 1-3) of the existing primary curriculum (CDC, 2005) consists of the following core subjects and weightage per week:

Early Grade Curriculum (CDC, 2005)

SN	Subject	Weightage/period (45 minute each)	% of Weightage	Full Marks
1.	Nepali	8	23	100
2.	English	5	15	100
3.	Mathematics	6	18	100
4.	Social Studies and Creative Arts	6	18	100
5.	Science, Health and Physical Education	5	15	100
6.	Local Subject/Mother Tongue	4	11	100
	6 Subjects	**34**	**100**	**600**

8. The early grade curriculum (CDC, 2005) consists of the subjects namely, Nepali, English, Mathematics, Social Studies and Creative Arts, Science, Health and Physical Education and Local Subject/Mother Tongue. Some subjects have similar weightage whereas some get different but each subject has assigned equal full marks.

In the above context, to what extent is possible to restructure (e.g. merge, remove etc.), subjects, weightage and full marks mentioned in the table above for increasing weightage of Nepali language instruction aiming at developing reading skills and habits of early grade children?

8.1   If it is possible to restructure the subjects, weightage and full marks, if yes, how? Please explain below:

Restructuring of Subjects, Weightage and Full Marks

SN	Subject	Weightage	Full Marks	Justification
1.				
2.				
3.				
4.				
5.				

8.2   If there is not possible, why?

Difficulty for Restructuring of Subjects, Weightage and Full Marks

SN.	Why?
1	
2.	
3.	

9. Instruction Design of National Early Grade Program (NEGRP)

NEGRP has developed its Instruction Design that consists of scope and sequence, teacher guides and student's exercise book of Nepali language for early grades. The components of reading includes the following intended to develop reading skills and habit of early children.

7. Phonological awareness

8. Graph phonemic awareness

9. Fluency

10. Vocabulary

11. Comprehension

12. Writing

9.1 With a view to developing reading skills and habit of children under the above reading component framework, to what extent is possible to teach Nepali language in 8 periods/weekly as provided by the existing curriculum (2005)? Explain on the following points:

SN	9.1.1 If it is possible, how?	2.1.2 If not, why?
1.		
2.		

9.2 With a view to developing reading skills and habits of early grade children using the framework of reading mentioned above, how much weightage/period and time per period require?

SN	Subject	Number of Weightage/weekly	Time/period (minute)
1.	Nepali language		

Why?			

10. Increasing Weightage for Early Grades based on the Instruction Design of National Early Grade Program (NEGRP)

For developing the reading skills and habit of early grade children using NEGRP instructional design (e.g. scope and sequence, teacher guides and student's exercise book and others), there is need for increasing weightage for Nepali Language instruction.

10.1 In the above situation, what would be appropriate alternatives/options for increasing weightage of Nepali Language Instruction for early grades?

10.2 What should be done to implement the alternatives/options you suggested?

SN	Alternatives/options	Implementation Procedures
1.		
2.		
3.		

11. Any additional comment