

**Education for All 2004-09
Formative Research Project**

Study Report 16

**Basic Enabling Conditions for Quality School
Education: A Study on the Successful Schools for
Developing Norms and Standards for School Monitoring**



Tribhuvan University
Research Centre for Educational Innovation and Development (CERID)
2007

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Research Centre for Educational Innovation and Development
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Increasing access to and improving quality of basic and primary education have appeared as the major endeavour of the Government of Nepal (GON) for last 15 years. This endeavour raised the Net Enrollment Rate of primary level to 89.5 percent in 2008. As the trend of enrollment growth is encouraging, it is expected that the Millennium Development Goal related to *universal primary education* will be achieved in few years. However, ensuring quality of education is not as easy as increasing access to education. Rather, enhancing quality of education is challenging.

Currently, there is no unanimity among the stakeholders on the precise definition of quality of school education in both national and international educational arena. Similarly, the GON has yet to develop school monitoring instrument with norms and standards for assessing quality of school education. In this context, this study presented groundwork for defining quality school education, identified basic enabling conditions/requirements to be met by the schools for quality education, and developed norms and standards for determining quality education. These norms and standards, the research team believes, would be of immense help for school monitoring.

During our study, we acquired invaluable information required for this study from different groups of stakeholders at policy and practice levels. Hence, we would like to extend our heartfelt thanks to all of them. Specially, we are deeply grateful to Prof. Dr. Hridaya Ratna Bajracharya, Executive Director, CERID for providing us an opportunity to undertake this study. Our most heartfelt thanks go to Dr. Kishore Shrestha, Coordinator, FRP and Dr. Shreeram Prasad Lamichhane for their valuable suggestions. Similarly, we appreciate Prof. Kristin Tornes, technical advisor to FRP, FRAG members and reviewers of the report for their critical comments and suggestions. Furthermore, we would like to thank Mr. Suresh Shakya for preparing the report, Mr. Gautam Manandhar for layout and cover design and Mr. Arun Kiran Pradhan for language editing. Lastly, but not the least, our thanks are due to Mr. Surya Bahadur Mulmi, chief of administrative section, CERID for administrative support and Mr. Purushottam Acharya, Research Assistant for his support in completing the field work successfully.

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Prof. Komal Badan Malla
Researcher

Acronyms

AIN	Association of International Non-Governmental Organizaitons
AR	Associate Researcher
ARNEC	All Round National Education Committee
BPEP	Basic and Primary Education Project
CDC	Curriculum Development Centre
COPE	Community Owned Primary Education
DDC	District Development Committee
DEO	District Education Office
DNIDA	Danish International Development Assistance
DOE	Department of Education
EA and ER	Education Act and Education Regulation
EFA	Education for All
EFA-NPA	Education for All National Plan of Action Nepal 2001-2015
ETC	Educate the Children
FEDUC	Foundation for Educational Change
FGD	Focus Group Discussion
GON	Government of Nepal
HLEC	High Level National Education Commission
HLWCSE	High Level Working Committee on School Education
HSE	Higher Secondary Education
HT	Head Teacher
IDA	International Development Association
INGOs	International Non-Governmental Organizations
JICA	Japan International Cooperation Agency
MOES	Ministry of Education and Sports
NCED	National Centre for Educational Development
NEC	National Education Commission
NER	Net Enrollment Ratio
NNEPC	Nepal National Education Planning Commission
PCL	Proficiency Certificate Level
PTA	Parent-Teacher Association
RA	Research Assistant
RC	Resource Centre
RCC	Reinforced Cement Concrete
RP	Resource Person
SMC	School Management Committee
SIP	School Improvement Plan
SS	School Supervisor
STR	Student-Teacher Ratio
TSCR	Teacher Service Commission Regulations
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational Scientific and Cultural Organization
UNICEF	United Nations Children's Educational Fund
VDC	Village Development Committee

Executive Summary

Background

One of the goals set by the World Education Forum on Education for All held in Dakar, Senegal in April 2000 is to improve all aspects of quality education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills. This goal was included in Education for All National Plan of Action (EFA-NPA), Nepal 2001-2015 and Education for All 2004-2009 Core Document developed by the Government of Nepal (GON). The key term *quality education* mentioned in this goal was perceived by different people in different ways. Hence, universally accepted concept of quality education is still lacking. Since the concept of quality education is not clear, different educationists and educational agencies identified different requirements for quality school education. In this regard, EFA-NPA Nepal 2001-2015 recommended some indicators of quality education as basic requirements. But these indicators of quality education were not well defined and hence, they could not be used as norms and standards for quality assurance. After the development of well-defined norms and standards, the ways of achieving them need to be identified in order to ensure quality of school education. Furthermore, the ways of achieving them under different requirements of quality education may be different which are also to be explored. Considering these facts, this study has been undertaken.

The major objectives of this study were to find out the perception of stakeholders of policy and practice levels on quality of school education, to identify the basic requirements of quality education, to develop norms and standards of quality school education, and to find out the ways of achieving these norms and standards. In order to accomplish these objectives, the required data were collected from the central level officials of Ministry of Education and Sports, Department of Education, Curriculum Development Centre, UN agencies and International Non-governmental Organization; the district level officials such as 4 District Education Officers, School Supervisors/Resources Persons; grassroots levels stakeholders such as 16 Head Teachers (HTs), 32 teachers and 160 School Management Committee (SMC) and Parent-teacher Association (PTA) chairpersons and the members, and 8 parents of Ilam, Kavrepalanchowk, Kaski and Banke districts. Interview Schedule for different groups of stakeholders, Guidelines for Focus Group Discussion and School Survey Form were used for collecting the data.

Major Findings

Policy and practice level stakeholders perceived high retention rate, high success rate, high achievement level, high cycle completion rate and content useful for daily life of students as quality education. Besides, the district level officials perceived quality education in terms of impact of primary education on the performance of the students at lower secondary grades.

Basic requirements for quality education were adequate number of qualified and quality teachers, teacher training, physical facilities, instructional materials, monitoring and supervision, teaching-learning process, continuous assessment of students, effective leadership of HTs, active SMC and PTA and textbooks and teacher guides.

Majority of the sample schools had adequate land and adequate number of classrooms as per grades/sections. All the sample schools had adequate toilets and drinking water facilities. The classrooms of grade I and II of all the sample schools had carpets and low-level tables. These classrooms were child-friendly and attractive because of the display of materials in painted walls in the classrooms.

The number of teachers was found inadequate either in terms of grades/sections in some sample schools or in terms of student-teacher ratio (STR) in other schools. Most of the teachers of sample primary schools had the qualification of Proficiency Certificate Level (PCL) or Higher Secondary Education (HSE) and the remaining ones had SLC who felt difficulty in teaching upper grades of the primary schools.

The teachers and HTs themselves felt that the minimum qualification for HT of a primary school must be one level higher than that of the primary school teachers as they need to play a leading role in managing schools and conducting in-house teacher training.

All the sample schools, though they were not as per the format given by DOE, prepared SIP. However, the teachers of majority of sample schools did not prepare annual teaching plans.

Teacher's meetings and SMC's meetings were found to have been held for acquiring support from the community and for improving the teaching-learning process.

Child-friendly teaching and continuous assessment of students were being practiced in majority of the sample schools, which were found useful as the students got feedback and the parents received progress reports of their children.

Supervision of class teaching by HT and monitoring of schools by SMC were carried out in sample schools. Most of the sample schools did not have the provision of formal evaluation of teachers.

The expenses on salary in majority of schools lied between 60 to 80 percent. Regarding the allocation of budgets in different headings except salary, emphasis was also given on instructional and play materials, co-curricular and extra-curricular activities, and repair and maintenance.

Recommendations

Concept of Quality School Education: The DOE should develop an acceptable concept of quality school education based on the findings of this study through national workshops.

Qualification and Management of Teachers: Minimum qualification for a primary school teacher should be raised from SLC to PCL/Higher Secondary Education (HSE) in education or PCL in any other subjects with 10-month teacher training. The adequate number of such teachers should be managed by the GON. SMCs should be made responsible for managing such teachers until the government provides them.

Classroom Environment and Teaching-Learning Process: In order to make the classroom environment and the teaching-learning process attractive and child-friendly, training should be given to HTs and teachers, and exposure visits of the successful schools for HTs, teachers and SMC chairpersons should be managed.

Experience and Qualification of HT: The teacher with 10-year teaching experience preferably with Bachelor's Degree should be appointed as HT.

Class Supervision and Monitoring: The teaching load of HT needs to be reduced to make the class supervision by HT adequate and effective. In order to ensure the monitoring of school by SMC chair and members, the monitoring schedule should be prepared in the beginning of academic session.

Physical Infrastructure: Land for the school should be acquired from VDC/municipality and/or individual donors or purchased at the lowest cost. Financial support from community, VDC/municipality, INGO and GON and labour donation from the community people should be received for managing adequate number of rooms, toilets and drinking water in the schools. The design of a building should be prepared by concerned officials of DEO as per its norms and standards.

School Plans : In order to develop SIP, Calendar of Operation and Annual Teaching Plan as per the format given by the DOE, training should be provided to HTs, teachers, SMC and PTA.

Continuous Assessment: The total marks should be distributed to class works, unit tests, and monthly tests along with the existing terminal examinations in order to conduct the assessment of students continuously,

Teacher Evaluation: The provision of the evaluation of teachers as mentioned in EA and ER should be implemented. For this, the Performance Appraisal Form should be made short, simple and objective. The total attendance of teachers should be made one of the criteria for promotion.

Expenditure: The percentage of expenditure in salary and non-salary headings should be 70 or less than 70 percent and 30 or more than 30 percent of the total budget respectively.

Finalization of Norms and Standards: The DOE should finalize the norms and standards of quality education for school monitoring which was developed by the study, through pre-testing and workshops.

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CHAPTER I

Introduction

Background

One of the main indicators of quantitative expansion of school education is the increment in number of students in the schools. Before the implementation of EFA 2004-2009 i.e. in 2003, the Net Enrollment Ratio (NER) at primary level was 83.5 percent. After the intervention of EFA Programme, the NER has been increased by 3.9 percent. However, at present, improving the quality of school education has been a matter of concern. Similarly, Education Commissions/Committees formed in the past have also given emphasis to qualitative improvement of school education.

Nepal National Education Planning Commission (NNEPC), 1956 emphasized on quality school education. In its report, quality education is perceived as good learning. The commission recommended the development of the best educational environment possible in each school for good learning. For this, the commission further recommended that minimum standard be established, met and maintained in the process of developing the best educational environment. Minimum standards, as stated in the report, include teachers, textbooks, community resources, locally available instructional materials, appropriate site and building for the school, equipment, spacious classrooms and extra curricular activities. Similarly, All Round National Education Committee (ARNEC), 1961 placed high priority for improving the quality of school education. The committee suggested to manage adequate number of trained teachers to develop relevant curriculum, to implement continuous assessment, to make the regular interaction between parents and teachers about their children's progress and to fix the student- teacher ratio i.e. 25-40:1.

In order to bring timely reform in primary education, National Education Commission (NEC), 1992 stressed the need of basic and refresher training for teachers, relevant curriculum, effective teaching learning process, monitoring, etc. Likewise, High Level National Education Commission (HLNEC), 1998 also gave emphasis to a training component, child-friendly materials, remedial teaching, and contents that are useful for daily life in order to improve the quality of education. Besides these suggestions, this commission recommended to raise the minimum qualification i.e. intermediate level for primary school teachers, to use continuous assessment system and liberal promotion policy and to transfer the responsibility of management, operation and monitoring of school to School Management Committee (SMC).

Similarly, in order to enhance the quality of school education, the GON has made efforts in the forms of Educational Projects/Programmes. One of these projects was Basic and Primary Education Project (BPEP I) which was implemented with the financial assistance of DANIDA, UNICEF, JICA, and IDA in July 1992. One of the main goals of the project was to improve the quality of education. In order to achieve this goal, BPEP contributed to five major areas: (i) curriculum development, (ii) textbook development, (iii) development of supplementary reading materials (iv) in-service teacher training (v) continuous assessment programme. Similarly, the second phase of BPEP (1997-2002) gave continuity to these areas for the same purpose. These projects were developed and implemented in line with the commitment made

by Nepal to achieve EFA goals, which were set by the World Conference on Education for All held in Jomtein, Thailand in 1990.

The World Education Forum on EFA held in Dakar, Senegal in April 2000 for reviewing the achievement of EFA campaign started in 1990 in Jomtein, Thailand, realized the difficulties of countries like Nepal. The Forum adapted the Dakar Framework for Action which set six major EFA goals to be achieved by 2015. It also listed strategies for achieving these goals. One of the goals of Dakar Framework for Action is *to improve all aspects of quality education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills*. The GON adapted the Dakar Framework for Action and in line with it, Education For All National Plan of Action (EFA NPA), Nepal (2001-2015) and Education For All 2004-2009 Core Document were developed. One of the objectives of EFA 2004-2009 programme is to enhance the quality and relevance of primary education. Quality of education as mentioned in Core Document relates to the holistic development and high learning achievement of children. For the realization of quality education, five basic requirements are indispensable. These requirements as basic enabling conditions for quality education are: required number of trained, qualified and effective teachers; relevant textbooks and instructional materials; conducive teaching-learning environment and child-focused teaching-learning method; school improvement in terms of physical, human, material and educational resources; and management and capacity building with decision-making power at all levels. Likewise, physical infrastructure, curriculum and curricular materials, teacher management, school management, instructional process, community participation, effective SMC with adequate authority, decentralization, etc. as basic enabling conditions for quality education were mentioned in various study reports (World Bank, 1995; CERID, 2003; CERID 2004; AIN 2007; and Wagle, 2007).

In order to achieve the goal related to quality education, several efforts are being made by the GON. Besides these efforts, INGOs and UN agencies (UNICEF, UNESCO, UNDP through Community Owned Primary Education programme, Save the Children/Norway, Save the Children/US, Japan International Cooperation Agency, Plan Nepal, World Bank through Community School Support Programme, Educate the Children, World Vision etc.) have been contributing to the improvement of quality education in one way or another.

Although each of education committees and commissions mentioned above, presented recommendations for improving the quality of education, and various efforts have been made from the part of the GON, INGOs and UN agencies, the key issue regarding unclear and implicit concept of quality education still persists. It is because the term '*quality of education*' is not a precise one and often means different things to different people. It has created a confusion to identify the requirements for quality education. Hence, norms and standards have not been developed yet, which can be used for school monitoring. This is because, EFA 2004-2009 programme heavily emphasized on the development of norms and standards of quality education.

Rationale of the Study

There is no consensus among educationists about the concept of quality education and hence, universally accepted concept of quality education is still lacking. Some educationists viewed quality education as success rate of students while others relate

it to merely average achievement level of students in different subjects. Some other perceived it in a broader sense as it includes high success rate, high achievement level, child-friendly environment, child-centered method etc. In Nepalese context, various efforts have been made to improve the quality of education though its concept is not still adequately clear. It is because different stakeholders viewed the concept of quality education differently. Hence, it is difficult to assess and improve the quality of school education.

Since the concept of quality education is not clear, different educationists and educational agencies identified different requirements as the enabling conditions for quality school education. However, there is an agreement among educational agencies about some requirements for quality education while they disagreed in some other requirements. In this regard, EFA NPA Nepal 2001-2015 recommended some indicators of quality education as basic requirements. However, it is questionable whether these requirements are adequate or not, how the stakeholders perceive them and to what extent schools can fulfill them.

In order to assess and improve the quality of school education, norms and standards for school monitoring should be established. But prior to implementation of EFA NPA Nepal 2001-2015, a set of separate norms and standards for school monitoring have not been developed. Though indicators to assess the quality of education and their outlines were stated in EFA-NPA Nepal 2001-2015, they are not well defined and hence, they could not be used as norms for quality assurance. For example, organization of staff meetings at close interval with meaningful agenda; frequent effective meetings of Parent-Teacher Association (PTA) and effective interaction between parents and teachers; regular and meaningful supervision by head teachers etc. are some of the indicators under areas of inputs. In these indicators, the terms *close interval*, *meaningful agenda*, *frequent meetings*, *effective interactions*, *regular classroom supervision* are not specific. Besides, there was a lack of mechanism and process to take quality initiatives in the schools, to monitor the improvements in the school and to provide feedback for continuous improvement.

Once the norms and standards are developed, the ways of achieving them need to be identified in order to ensure quality of school education. Furthermore, the ways of achieving the norms and standards under different aspects of quality education may be different, which are also to be explored.

The above mentioned facts reveal that the perception of stakeholders of different levels on quality education has not been clearly appeared. Because of this, definite requirements as the enabling conditions for quality education have not been identified. Hence, obviously, norms and standards under each requirement for quality education have not been adequately and clearly developed yet. Because of the lack of norms and standards, the ways of achieving them has not been a subject of concern. Realizing these issues, this study has been undertaken.

Key Research Questions

The key research questions of this study are as follows:

- How do the key stakeholders of policy and practice levels perceive quality of school education?
- What are the basic requirements for quality education?
- What are the basic norms and standards for ensuring quality education?

- How can the norms and standards be achieved?

Delimitations of the Study

- This study was confined to the quality of *primary education* only.
- This study included only the successful schools of sample districts.

CHAPTER II

Review of Related Literature

This chapter deals with the review of related literature: books, journals, research reports, commissions/committee reports, Education Act and Education Regulations (EA and ER), country paper, documents published by the GON etc. on different aspects of quality education such as (i) concept (ii) framework (iii) requirements and (iv) norms and standards of quality school education. Hence, for the sake of convenience, this chapter is divided into four sections as mentioned above.

Evolving Concept of Quality School Education

There is a growing consensus about the importance of quality education. Hence, a high-quality education must be accessible to all children. But there is much less agreement on what the concept means in practice as there is no consensus among educationists to date as to what constitutes quality in education. So, understanding of what constitutes the quality of education, is therefore, still evolving, as stated by Ross and Genevois, 2006.

Various educationists and agencies presented their views regarding the concept of quality education. Their views are found different in terms of coverage of quality education.

Traditionally, the definition of quality education included literacy, numeracy and life skills, and these aspects were linked directly to such critical components as teachers, content, methodology, examination systems, policy and management. That is, in the past, most of the emphasis was given on education related to cognitive understanding and development. Similarly, in narrower sense, quality in education equals customer's satisfaction (Sallis, 1993). In other words, satisfaction which guardians and employers get from education is perceived as quality. Sallis further stated that the definition of quality has two aspects: (i) measuring up to specification, and (ii) meeting a customer's requirements.

Some studies have identified their dependent variables as quality of education. Hence, the quality of education should be defined in terms of its results or academic achievement, but studies under quality education must be fine-tuned in order to find out the factors influencing these results. In this regard, as suggested by Fuller (1985) quality education includes (i) the amount of material inputs assigned to schools per student, and (ii) the level of efficiency with which a given amount of inputs is organized and administered in order to improve the pupils learning achievement. In this study, quality of education is defined at the individual level and at the level of each school, as the achievement of relevant learning.

Quality of basic education, in totality, can not be understood unless the concept of equality is incorporated. The concept of equality compliments that of relevant learning in the global assessment of quality of education system. The concept of relevant learning achievement should be more carefully defined. What is truly relevant is the ability to understand the written language, and to express oneself in writing, to reason, to solve problems, to analyze, to evaluate options and to obtain information. This implies that it is emphasizing more on ability than on knowledge (Schmelkes; Norega; Lavin; and Martinez, 1996).

However, many argue that quality has to be seen with specific reference to the objectives of primary schooling, which delimits the scope of activities in the schools. Viewing from these angles, many researchers tend to equate school quality with school effectiveness and bring the learners' achievement to the central stage as the overarching bases for assessing school quality (Govind and Varghese, 1993).

The view of quality education presented by Beeby is wider than those mentioned above. According to Beeby (1979), quality may be viewed as qualitative change. The qualitative change is differentiated in terms of (i) qualitative change in the classroom – what is taught and how it is taught, and (ii) qualitative change in the flow of students – who is taught and where he/she is taught. This conceptualization of Beeby focused on the actors and actions involved in school functioning rather than the passive materials inputs available in schools (Govinda and Varghese, 1993).

At the beginning of twenty first century education is increasingly being understood to be more than the 3Rs, and extends to an expanded vision of education as articulated by the Jomtein Conference on EFA 1990 (UNESCO, 1990) and later reaffirmed it by the Dakar World Education Forum in 2000 (UNESCO, 2000). Moreover, there is a need to address social and other dimensions of learning. Hence, quality education is expected to make a contribution to sustainable human development, peace and security, universal values, informal decision-making, and quality of life at individual, societal and global level (Ross and Genevois, 2006).

UNESCO, 2005 states that two principles characterized most attempts to define quality in education, the first identifies learner's cognitive development as the major explicit objective of all education system. Accordingly, the success with which systems achieve this, is one indicator of their quality. The second emphasizes education's role in promoting values and attitude of responsible citizenship and in nurturing creative and emotional development (UNESCO, 2005).

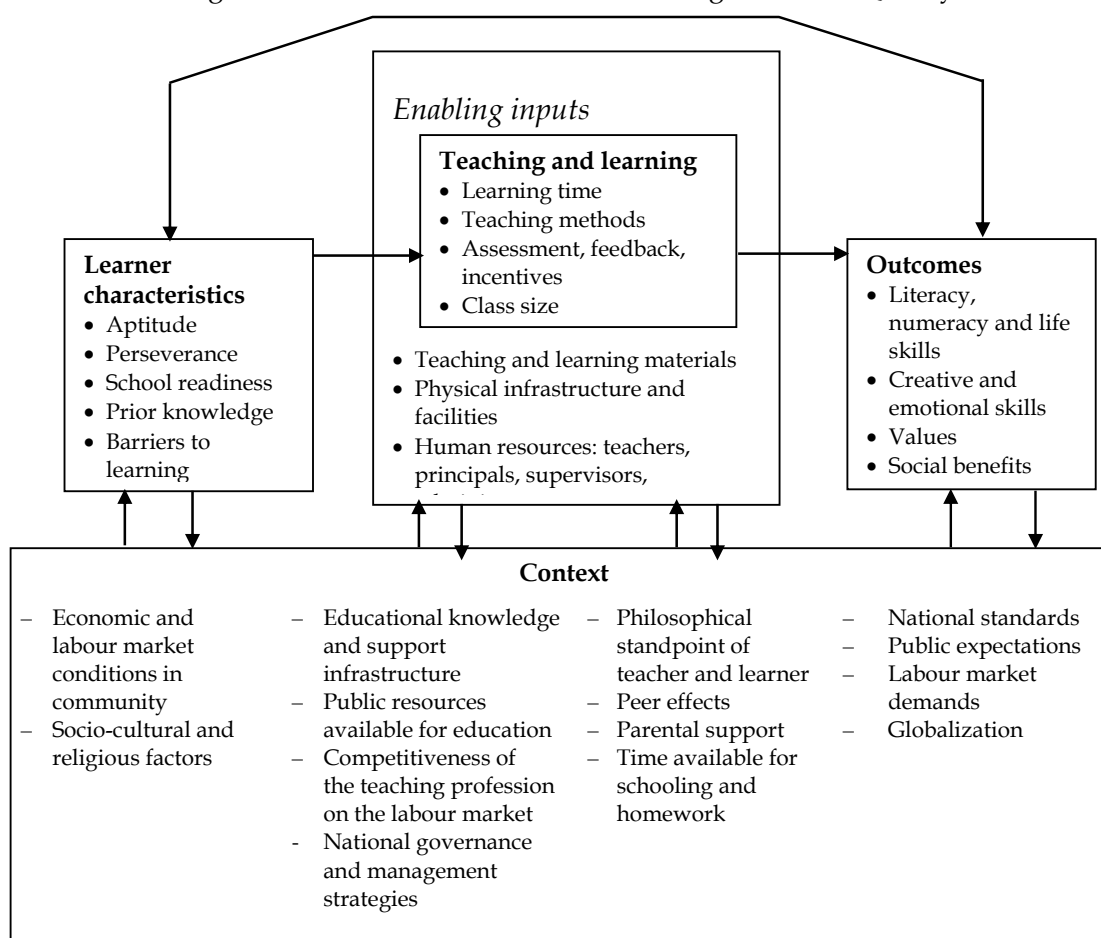
More recently, quality education refers that all school age children attend school regularly, learn effectively, graduate successfully and live productively. Quality education is imparting knowledge, understanding and skills using the best medium, and child-centered methods for an insightful understanding of subject matter in a child-friendly environment (AIN, 2007).

While considering the above-mentioned views presented by different educationists and agencies, the concept of quality education, is found to be comprehensive as it covers (i) child-friendly environment (ii) knowledge and skills related to a learner's needs (iii) promotion of values and attitudes (iv) child-centered methods, (v) success rate and achievement level of the learners, and (vi) productive living in the community. If these coverage of quality education is viewed from the system approach, the first, second and third dimensions mentioned above come under inputs, the fourth one falls under the process, the fifth one is related to product/outputs and the last one is concerned with the impact of education.

Framework of Quality School Education

With a view to clarify the concept of quality education, different writers and agencies presented different frameworks for quality education. The framework presented by UNESCO, 2005 is given below.

Figure 2.1: A Framework for Understanding Education Quality



As shown in figure 2.1, the framework takes into account five major factors affecting quality: (i) learner’s characteristics (ii) context (iii) inputs (iv) teaching and learning and (v) outcomes. The socio-economic background, gender, ability, race, ethnicity etc. of learners are different which create inequality and they must be taken into account while formulating the policy of quality education. While understanding education quality, socio-cultural and religious factors, economic and educational condition of the country, philosophical standpoint of stakeholders, expectations of labour market should be considered as a context.

The inputs as one of the factors of quality education include material and human resources. These inputs are curriculum, textbooks, learning materials, classrooms, library, teachers, managers, supervisors, teachers etc. Teaching-learning process is the next factor affecting quality education. Under it, time spent on learning, use of interactive teaching methods and assessment technique of learners’ progress emerge. Lastly, outcome dimension can be expressed in terms of academic achievement and broader social and economic gains.

Many researchers equated school quality with school effectiveness. In this regard, the World Bank, 1995 presented a conceptual framework for determining school effectiveness/quality as shown in Figure 2.2, which is similar to one mentioned in Figure 2.1.

Figure 2.2: Conceptual Framework: Factors Determining School Effectiveness

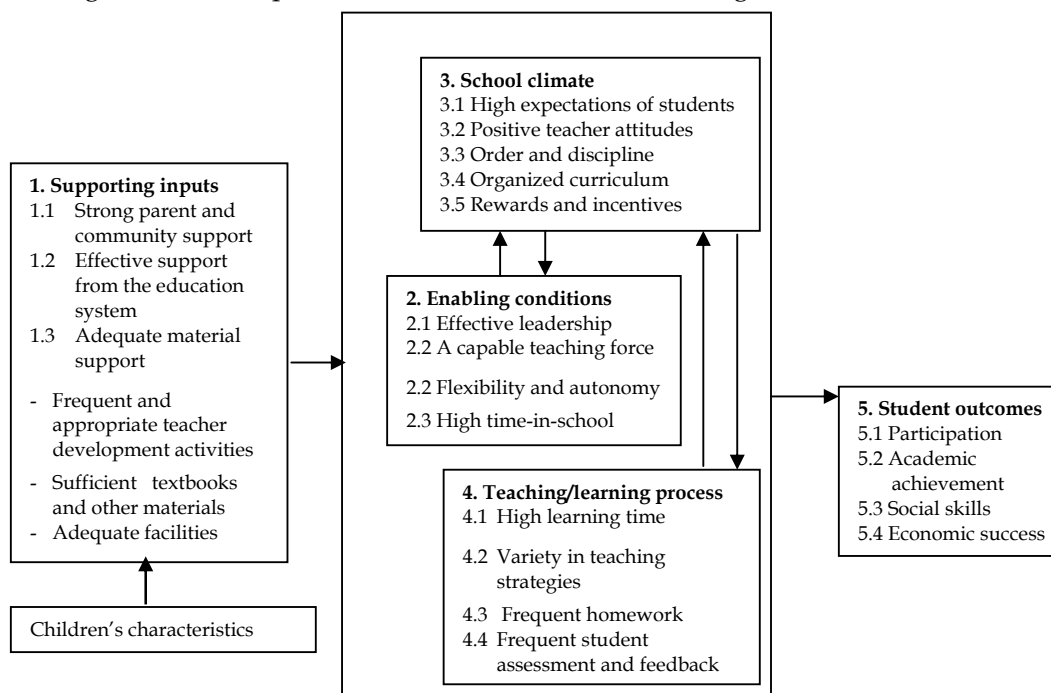


Figure 2.2 shows that five factors: supporting inputs, enabling conditions, school climate, teaching-learning process and student outcomes determine school effectiveness/quality. Supporting inputs include parents and community supports, education system's support and material support. It affects school climate, enabling conditions and teaching-learning process. The better school climate, appropriate enabling conditions and teaching-learning process result in satisfactory student outcomes in terms of more participation, academic achievement, social skills and economic success of the students.

In order to improve the quality of education, a holistic approach as mentioned in EFA - NPA Nepal, 2001-2015, needs to be taken. The framework of this holistic approach is given in the following table.

Table 2.1

Framework of Quality Indicators

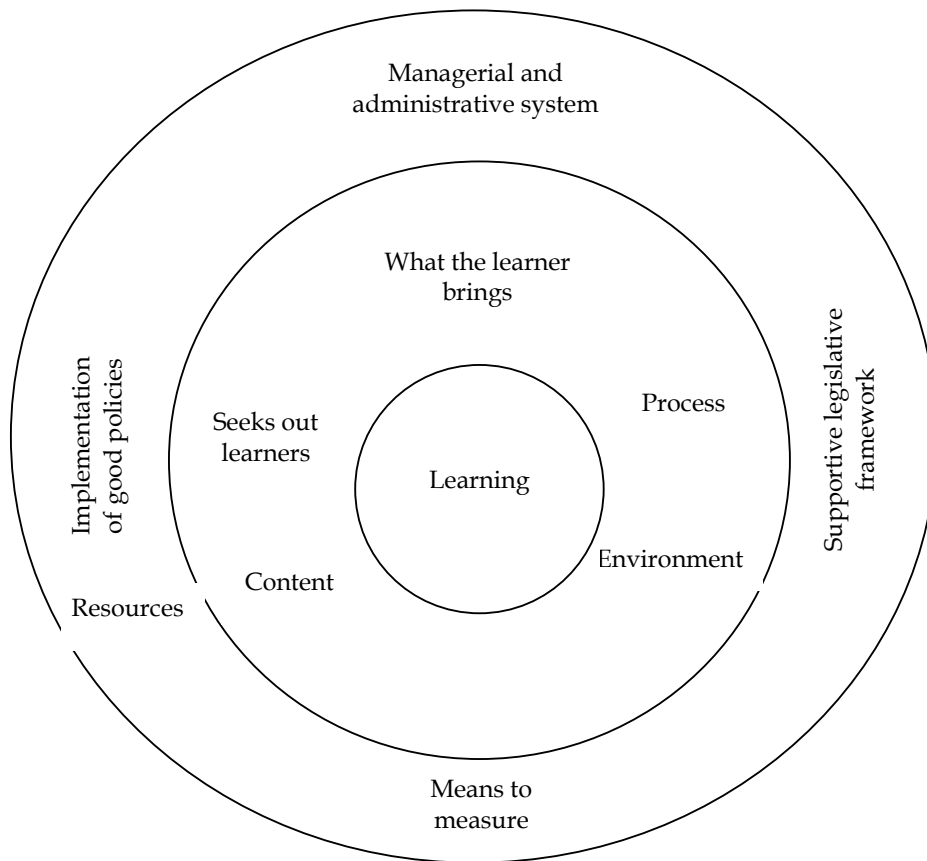
System Support Indicators	Areas of Input Indicators	Areas of Process Indicators	Output and Outcome Indicators
National policy support	The school management system	The teaching learning system	Higher national norm of student achievement
Political commitment	Teacher management system	Curriculum transaction and instruction system	Positive impact on social/community life
Support of civil society	Physical facilities management system	The student achievement assessment system	Increased quality of social and economic life
Change in role of stakeholders			Higher rate of achievement at secondary education

As mentioned in the Table 2.1, four quality indicators come under the framework of quality education. These are system support, areas of inputs, areas of process, and

outputs and outcomes. The output and outcome, which includes higher student's achievement, positive impact on social life and increased quality of social and economic life is considered as dependent variable in this framework, which is affected, by system support, inputs and process.

The next framework of quality education given by Ross and Genevois, 2006 is different from those mentioned above. This is because the primary concern of quality education as given in this framework is the learning of the learner. Similarly, the inputs, process, and environment that fosters learning are also important for quality education. The framework of quality education is given below.

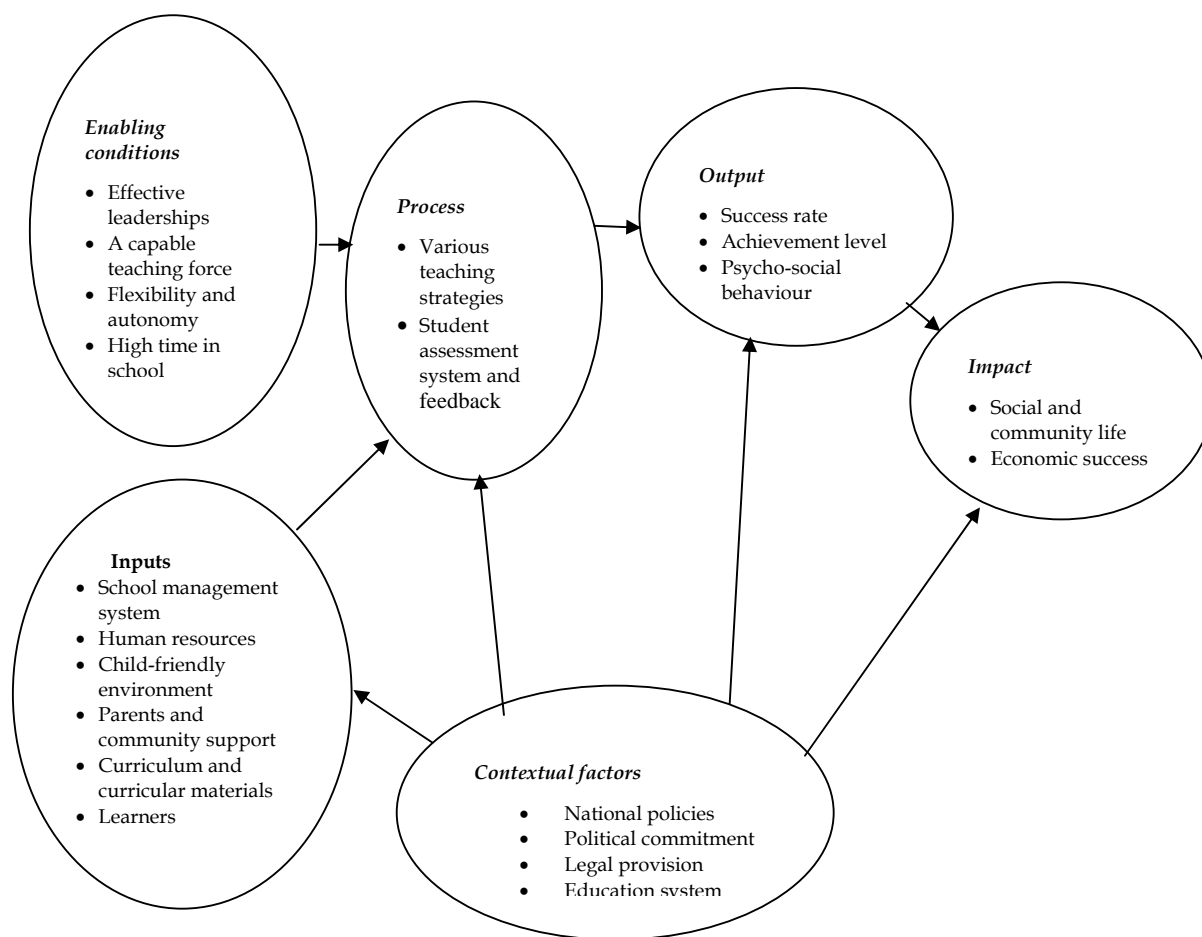
Figure 2.3: Framework of Quality Education



As shown in Figure 2.3, all the elements which affect the quality of education can be seen at two levels: (i) at the level of learner in his or her learning environment and (ii) at the level of education system that creates and supports learning experience. In other words, learning is at the centre and is surrounded by the inner learner level and the outer system level. Hence, ten dimensions of both learner level and system level given in Figure 2.3 heavily affect the learning, which is the prime concern of the quality education.

Based on the review of above-mentioned frameworks of quality education, a simplified and comprehensive framework of quality education including important dimensions of four frameworks mentioned above has been developed under this study, which is presented below.

Figure 2.4: Framework of Quality School Education



The figure, which is presented above, is self-explanatory.

Requirements for Quality School Education

Although there is no unanimous concept of quality school education as mentioned in Section 2.1, the educationists and educational agencies agreed that certain basic requirements are essential for ensuring quality school education. However, the requirements identified by these educationists and agencies are found to be different, to some extent. In this regard, the World Bank identified the following requirements for quality school education.

Construction: Location of school within the walking distance of children and regular maintenance and repair of the existing facilities including laboratories and boundary walls, are mentioned under this requirement.

Curriculum reform: Another requirement for quality education is the curriculum, which should be reformed as and when required.

Textbooks and materials: Supply of quality textbooks to poor children free of cost is also identified as the basic requirement for quality education. Similarly, increase in expenditure on non-salary recurrent cost for materials also improves the quality of school education.

Teachers: The qualified teachers including female teachers need to be hired on merit basis. Their regularity in the schools is the major requirement to ensure the quality education.

Training: In order to improve the quality of education, the training for teachers is also identified as a basic requirement.

Evaluation of teachers: Regular evaluation of teachers is required to improve the teaching-learning process, so that it helps to enhance the quality of education.

Development of assessment capacity: Development of teachers' capacity to assess students' performance has also been identified as a separate requirement for quality education.

Decentralized management: In order to improve the quality of education, decision-making authority should be decentralized toward the local level.

Involvement of parents: Improving education quality also requires more effective parental involvement in cooperation with the teachers at the community level. For this, PTA needs to be formed in each school.

Involvement of NGOs: NGOs should be involved for acquiring different types of supports for schools, which eventually help improve the quality of school education.

The Tenth Plan 2002-2007 focused only on five main requirements for quality school education. These are compulsory teacher training, teaching license, examination, monitoring and supervision, and computer literacy (NPC, 2002).

The requirements for quality school education have been mentioned in a series of research reports published by CERID. Research report on *School Effectiveness: A Synthesis of Indicators, 2003* recommended the following points as the basic requirements for quality education.

- Regularity of the students in the school
- Regularity of the teachers in the school
- Motivating students and teachers
- Maintaining discipline in the school
- Use of instructional materials
- Child-centered teaching-learning process
- Coaching classes for weak students
- Provision for parents and teachers interaction
- Effective leadership of head teachers
- Cordial relationship between head teachers (HTs) and SMC
- Congenial atmosphere in the school

Similar types of requirements were identified by another study entitled *School Effectiveness: Head Teacher Leadership, 2004*. Besides the requirements mentioned above, training for the teachers, attractive physical environment of the school, qualification and dedication of head teacher, extra-curricular activities were also considered as the basic requirements for quality education. Similarly, the next study on *Piloting of Community-based Approach in Basic and Primary Education* identified

many factors as the basic requirements for quality school education. However, the major ones recommended by this study are as follows.

Physical environment: It includes pleasant place, scenery around, calm and quiet, toilets for teachers, toilets for girls and boys, pure pipe drinking water, airy classroom and sufficient light in the classroom.

Classroom atmosphere: A classroom should be spacious with adequate light and ventilation, enjoyable, pleasant, appropriate and neat and clean etc. To make the mind of the children happy. In order to make the classrooms attractive, instructional materials such as pictures, charts, posters etc. should be displayed on the walls.

Student-teacher interaction: Interactive teaching-learning process is also considered as one of the major requirements for quality school education.

Similarly, NNEPC, 1956 recommended seven basic requirements for quality of school education. These requirements are teachers, textbooks, community resources, instructional materials, building, site of the school and equipment. The HLNEC, 1998 identified several requirements to be fulfilled for ensuring quality education. These are physical facilities, instructional facilities, monitoring and supervision, improved examination system, updating curriculum, updating library, updating teacher training, quality process for higher achievement level, improved learning environment, teacher qualification, continuous assessment system and liberal promotion policy, and school management.

According to Devkota (2001), the quality education depends on seven essential factors: (i) effective school leadership, (ii) capable, motivated and well-trained teachers, (iii) appropriate and well-designed curriculum, (iv) effective learning materials, (v) teaching methodologies, (vi) suitable and well-maintained learning environment and (vii) valid and reliable examination systems. Besides these factors, a number of non-school factors affect the quality of education. These are: (i) socio-economic factors of the students, (ii) attitude of the parents and their support, (iii) health and nutrition of the student, and (iv) mother tongue of the children. In addition to these factors, Shrestha, 2001 identified standard textbooks, effective management and supervision and adequate provision for research and development as the determinants of quality education.

Similarly, AIN 2007 also identified similar requirements as mentioned above for quality school education, which are enumerated below.

- Adequate and appropriate school infrastructure
- Child-friendly, safe and effective learning environment
- Adequate number of committed, competent and confident teachers
- Relevant curriculum and appropriate textbooks as per local context
- Child-centered teaching-learning methods and materials

Although EFA NPA Nepal 2001-2015 has not explicitly stated the requirements for quality education, following points can be drawn from the quality framework as the basic requirements for quality education.

- Physical facilities
- Trained and qualified head teacher

- Effective SMC with adequate authority
- Performance appraisal of HT
- Supervision of classroom teaching by HT
- Full and complete attendance of teachers and students
- Maximum teaching days as prescribed by education regulations
- Full teacher's time on tasks
- Class size
- Staff meeting
- Active PTA
- Qualified and trained teachers
- Involvement of teachers in the preparation of different types of planning
- Provision of promotion of teachers
- Evaluation of teachers by students, peers and parents
- Class space
- Adequate instructional materials
- Provision of library
- Availability of curriculum and curricular materials
- Provision of continuous assessment
- Provision of teaching-learning process
- Provision of regular maintenance

Similarly, five major requirements for quality school education were identified in EFA 2004-2009 Core Document. These requirements were trained and effective teachers, textbooks and instructional materials, learning environment, school management and capacity building.

Based on the review of literature related to requirements for quality school education mentioned above, 30 different types of requirements were identified, which is given in the following table.

Table 2.2
Requirements for Quality Education

Requirements	Agencies						
	World Bank	CERID I	CERID II	CERID III	EFA-NPA Nepal 2001-2015	EFA 2001-2002 Core Document	AIN
Construction/physical infrastructure	✓		✓	✓	✓		✓
Curriculum	✓				✓		✓
Textbooks and materials	✓				✓	✓	✓
Teachers	✓	✓	✓	✓	✓		✓
Training	✓	✓	✓		✓	✓	
Assessment of teachers	✓				✓		
Development of assessment capacity of teachers	✓						
Motivation of teachers		✓	✓				
Instructional materials	✓	✓	✓	✓	✓	✓	✓
Full teacher's time on task					✓		
Involvement of teachers in different types of planning					✓		
Leadership of HT		✓	✓		✓		
Regularity of students		✓	✓		✓		
Motivation of students		✓	✓				
Coaching classes for weak students		✓	✓				
Maintaining discipline		✓	✓				
Child-centered teaching-learning process		✓	✓	✓	✓		✓
Class size					✓		
Maximum teaching days					✓		
Extra-curricular activities			✓				
Staff meeting					✓		
Cordial relationship between HT and SMC		✓	✓				
Effective SMC with adequate authority					✓		
Provision of continuous assessment of student performance					✓		
Congenial atmosphere i.e. child-friendly environment in the school		✓	✓	✓		✓	✓
Decentralized management	✓					✓	
Provision of library					✓		
Involvement of parents	✓	✓	✓		✓		
Involvement of NGOs	✓						
Regular maintenance					✓		

Source: World Bank

CERID I: School Effectiveness: A Synthesis of Indicators, 2003.

CERID II: School Effectiveness: Head Teacher Leadership, 2004.

CERID III: Piloting of Community based Approach for Basic and Primary Education

AIN: Association of International Non-government Organizations

Norms and Standards of Quality Education

The idea of norms and standards is closely related to the idea of quality. As mentioned in Section 2.1, since there is no universally accepted concept of quality education, there is no consensus among educationists on norms and standards required for different aspects of requirements for quality school education. However, in considering what is meant by a standard, the number of dictionary definitions seems to be relevant to education. These definitions are: degree of excellence required for particular purpose; a measure of what is adequate; and a socially or practically described level of performance. Specifically, standards are minimum outcomes set by the government at national level, which every school needs to accomplish. In this sense, there can be many standards to be set up to facilitate and control the quality of education at various levels (Wagle, 2007).

While considering the definitions mentioned above, a standard for quality education should reflect on minimum expectations of stakeholders. Hence, norms and standards are essential in order to assess and ensure quality in education. In line with this, The Tenth Plan set the objective of developing norms and standards for quality school education (NPC, 2002). Based on this objective, EFA 2004-2009 Core Document focused on setting norms and standards under each basic requirements such as teachers, textbooks and instructional materials, learning environment, school improvement and management and capacity building for quality education (MOES, 2003). More importantly, assuring uniform quality education in all schools, norms and standards for school monitoring are established.

While reviewing national and international documents in terms of observable and measurable form, the norms and standards are established in different ways. These norms and standards mentioned in NNEPC, 1956; HLWCSE for Education, 2001; Education Act (Eight Amendment), 1971 and Education Regulations, 2002, and EPA-NPA Nepal 2001-2015, were related to physical facilities, teacher management, school management, teaching-learning process, student achievement, assessment system, teacher evaluation criteria, and area of output. These norms and standards are given Appendix-A.

Apart from the norms and standards mentioned in Appendix-A, some norms and standards related to teachers, students and school management were mentioned in the Tenth Plan. Some norms/standards related to curriculum, student performance, leadership, management, teacher policy, finance and learning resource were developed by Wagle, 2007; and norms and standards related to enrolment, efficiency of school, regularity of students and teacher, and training for teachers were mentioned in BPE Master Plan 1998-2002, as well. All these norms and standards are given in Appendix-B.

CHAPTER III

Study Design

This chapter deals with the study design adopted in this study. It includes sampling, data gathering instruments, data collection procedure and data analysis procedure.

Sampling

Districts, schools and respondents were selected by using purposive sampling as this study focused on the successful schools only. The process of selecting districts, schools and respondents are separately presented below.

Selection of Districts

Districts were selected on the basis of two criteria: (i) representation of development regions and (ii) availability of successful schools identified by previous studies and projects/programmes. Considering these two criteria, Ilam, Kavrepalanchok, Kaski and Banke were selected from eastern, central, western, and mid and far-western regions respectively.

Selection of Schools

Schools were selected using stratified sampling. All the schools of the sample districts were divided into two strata: (i) community schools (government-supported schools) and (ii) institutional schools (private schools). Three schools from the first strata and one from the second strata were selected purposively. It is purposive in the sense that only successful schools were selected from both these strata. Successful schools were identified on three bases: (i) successful schools including the pilot schools identified by Community School Support Programme (CSSP) (ii) successful schools identified by concerned officials of District Education Office (DEO), and (iii) successful schools identified by the research team. The schools, which were included in the study, were considered as successful in terms of context, in which the schools were being run, inputs, process and output. The context in which the sample schools were being run was good as they were managed by community, had active SMCs, maintained financial transparency, and acquired adequate community and parental supports. These schools had appropriate physical and learning environment, adequate instructional materials and trained teachers with higher qualification as inputs. Similarly, the process aspect of these schools, such as sitting arrangement, preparation of SIP, calendar of operation and annual teaching plan, child-centred teaching method, classroom supervision by HTs and remedial teaching, use of continuous assessment of students, monitoring by SMCs and division of works for teachers apart from teaching was also found appropriate. Lastly, outputs of these schools were comparatively better than that of other schools as stated by DEO officials.

Altogether there were 16 sample schools of which 12 community schools (3 from each sample district) and 4 institutional schools (1 from each sample district) were selected for this study, which is given in the following table.

Table 3.1

Number of Sample Schools by District

Districts	Community Schools	Institutional Schools	Total
Ilam	3	1	4
Kavrepalanchok	3	1	4
Kaski	3	1	4
Banke	3	1	4
Total	12	4	16

Selection of Respondents

Respondents were selected from three levels: central, district and grassroots.

Central level: Since one of the objectives of this study was to find out the perception of policy level stakeholders on quality education, the respondents from Ministry of Education and Sports (MOES), Department of Education (DOE), and Curriculum Development Centre (CDC) were included in this study. Similarly, 3 educationists and 5 officials of NGOs/INGOs and UN agencies working in the field of education were also included.

District level: District Education Officers and two school supervisors/resource persons (SSs/RPs) from each sample district were included in this study. Hence, there were 4 District Education Officers and 8 SSs/RPs.

Grassroots level: Grassroots level respondents included HTs, teachers, chair/members of SMC/PTA and parents. HT, 2 teachers, 10 chair/members of SMC and parents from each sample school were included in this study. The total number of respondents from district and grassroots level is given in the following table.

Table 3.2

Number of Respondents

Districts	Respondents				
	District Education Officers	SSs/RPs	HTs	Teachers	Members of SMC/PTA and Parents
Ilam	1	2	4	8	40
Kavrepalanchok	1	2	4	8	40
Kaski	1	2	4	8	34
Banke	1	2	4	8	46
Total	4	8	16	32	160

Data Gathering Instruments

In order to collect both qualitative and quantitative data required for the accomplishment of objectives of the study, data gathering instruments were developed and finalized in the following ways.

Development of Data Gathering Instruments

Prior to developing data gathering instruments, specific areas under which the items were to be constructed, were identified through review of literature and consultation with the officials of MOES, DOE and CERID. These areas were finalized in the consultative meeting with officials of CERID. Then, a Data Matrix was prepared, which is given below.

Table 3.3
Data Matrix

S.N.	Themes/Dimensions	Respondents				
		Central level officials	District Education Officers and RPs/SSs	HTs	Teachers	SMC/PTA Chairpersons and Members and Parents
1	Perception of quality education	√	√	√	√	√
2	Basic requirements for quality education					
	Teachers	√	√	√	√	√
	Training	√	√	√	√	√
	Physical facilities	√	√	√	√	√
	Instructional materials	√	√	√	√	
	Monitoring and supervision	√	√	√	√	√
	Teaching-learning process	√	√	√	√	
	Continuous assessment of students	√	√	√	√	
	Effective leadership of HTs	√	√	√	√	√
	Active SMC/PTA	√	√	√	√	√
Textbooks and TGs	√	√	√	√		
3	Norms and standards					
	Physical facilities		√	√	√	
	Instructional and play materials		√	√	√	
	Teacher management		√	√	√	√
	School management		√	√	√	√
	Teaching-learning process		√	√	√	
	Curriculum transaction		√	√	√	
	Student achievement assessment			√	√	
	Teacher evaluation criteria	√	√	√	√	√
Output and outcomes	√	√	√	√		
4.	Ways of achieving norms and standards	√	√	√	√	√

Based on the data matrix, three types of instruments: (i) Interview Schedules, (ii) Guidelines for Focus Group Discussion (FGD) and (iii) School Survey Form were developed.

Interview Schedule for Central Level Officials/District Level Officials/HTs/Teachers: In order to solicit the information regarding the perception of quality education, basic requirements for quality education, norms and standards for ensuring quality education and ways of achieving them, the interview schedules for central level officials, district level officials, HTs, and teachers were prepared. Some items in the interview schedules were common to all respondents while some items were only for some groups of respondents. The interview schedules are given in Appendix C.

Guidelines for FGD: Guidelines for FGD with SMC chair/members and parents were prepared in order to collect the data on perception and the basic requirements for quality education. The guidelines for FGD are given in Appendix C.

School Survey Form: School Survey Form was prepared to gather the data regarding physical facilities, teaching-learning materials, background of teachers, curriculum transaction, classroom management, enrolment of students, success rate, achievement level and cycle completion rate.

Finalization of Instruments

The data gathering instruments were finalized by ensuring their validity and reliability.

Validity: Validity of data gathering instruments were determined in two ways. First, in order to cover all the aspects of each research question, data matrix which is presented in Table 3.3 was prepared. Based on the data matrix, items for each type of instrument were prepared. Then, data gathering instruments along with data matrix were presented in the consultative meeting with the officials of MOES, DOE and CERID. Based on their suggestions, some items were added in the instruments to cover all the aspects of the research questions. Second, all the instruments were pre-tested in Kavrepalanchok district in order to find out whether each item of the instruments measured what it purports to measure. Based on the feedback of pre-testing, some items in the instruments were improved.

Reliability: In order to determine the reliability of the instruments, they were administered twice to the same stakeholders. Based on the consistency of their responses given to each item, reliability of the instruments were assessed.

Data Collection Procedure

In order to collect the required data at centre, district and grassroots levels, a team consisting of Researchers, Associate Researcher (AR), Resource Persons (RP) and Research Assistant (RA) was formed. A one-day interaction programme among the team members was held to discuss about selecting the schools and respondents; the ways of administering instruments and recording the responses in the interview schedules and cleaning the data.

The research team visited DEO of sample districts and contacted district level stakeholders. After explaining the objectives of study, District Education Officer and 2 SSs/RPs were interviewed separately. Prior to interviewing them, rapport with each interviewee was established through informal talks. Each interviewee was

ensured that the responses provided by them would be used only for the purpose of the study. The major themes of the interview were explained to the interviewee. During the interview, their responses were recorded in the interview schedule. Before ending the interview, the summary of responses given by the interviewee were explained and asked him/her to add responses or revise the responses if needed. In consultation with concerned DEO officials, three successful community schools and one successful institutional school were identified in each sample district.

The team proceeded to each sample school where HT and teachers were interviewed. Prior to administering the interview, the same activities which were carried out before interviewing the DEO or SSs/RPs, were also conducted. While holding interviews, the responses given by the interviewee were recorded in the interview schedule. School Survey Form was filled up with the help of HT. In consultation with HT, SMC/PTA chairperson/members and parents were invited to school and conducted FGD with them.

Having completed the fieldwork at district and grassroots level, the researcher, AR and RP visited MOES, DOE, and CDC, and established rapport with the concerned officials. After explaining the objectives of the study, they were interviewed. The responses provided by them were recorded in their interview schedules.

Data Analysis Procedure

The data collected from different instruments were analyzed by following three sequential steps suggested by Best and Kahn, 2001, such as organizing the data, description and interpretation.

In order to organize the qualitative data, the collected data were tabulated under the following themes:

- Perception of stakeholders of policy and practice levels on quality education
- Basic requirements for quality education
 - Qualified and quality teachers
 - Teacher training
 - Physical facilities
 - Monitoring and supervision
 - Instructional materials
 - Teaching-learning process
 - Continuous assessment of students
 - Student enrollment, success rate and achievement level
 - Effective leaderships of HT
 - Active SMC/PTA
 - Textbooks and Teacher's Guides (TGs)
- Norms and standards for quality education
- Ways of achieving norms and standards

While tabulating the data under each theme, the opinions of the stakeholders were placed across different groups of stakeholders. Moreover, the opinions/responses were prioritized in order to facilitate the description.

The responses of stakeholders of each level (i.e. central, district, and grassroots level stakeholders) were described under each theme. While presenting the organized data, similar responses of different groups of stakeholders under each theme were described followed by different ones. Moreover, information drawn from the review of related literature were also described themetically. Based on the description of responses of different groups of stakeholders, findings were drawn. Then, these findings were logically explained.

Quantitative data related to number of students and teachers, expenditure on different headings, attendance of teachers, number of students who passed the examination, number of students who completed the primary level, scores obtained by the students in final examination, were collected from the sample schools. Based on these data, student-teacher ratio (STR), average attendance of teachers, success rate, cycle completion rate, achievement level were calculated. The STR was calculated on the basis of number of students and teachers in sample schools. Percentage was used for calculating the expenditure in different headings, success rate and cycle completion rate. Similarly, the achievement level of students was calculated using mean.

CHAPTER IV

Perception of Quality School Education

The review of related literature mentioned in Chapter II reveals that there is no consensus among different educationists and agencies on quality school education. This is also true in Nepalese context. So, one of the objectives of this study was to find out the perception of stakeholders of policy and practice level on quality school education. In order to accomplish this objective, the responses were collected from the stakeholders of central, district and grassroots levels. Some of these respondents were of policy level whereas some related to practice level. Although the responses of officials of INGOs, UN agencies and educationists do not come under these policy and practice levels, they, however, directly and indirectly, influence the formulation of policies regarding quality education. Hence, the responses from them were also collected regarding the perception of quality education.

The responses presented by them were analyzed and interpreted at policy and practice level. Then, comparison between their perceptions on quality education was made.

Perception of Stakeholders of Policy Level on Quality School Education

The concept of quality education, as perceived by policy level stakeholders, covers several aspects. According to them, high success rate and high achievement level of the students were conceived as quality education. If education can enable the students to apply the knowledge and skills they acquired in the school in their daily life and can bring changes in the behavior of the students, such kind of education can be considered as quality education. Moreover, some stakeholders viewed that quality education should impart such subject matter which can satisfy the parents and learners and such skills which are useful for daily living. In other words, such education is conceived as quality education if it is based on needs and interests of the children.

Apart from the aspects of quality education mentioned above, some stakeholders stated that some other aspects should also be included in quality education. They stated that the quality education needs to enhance proficiency in Nepali and English language. This view seems to be specific in nature whereas some other stakeholders viewed quality education broadly. According to them, quality education should give emphasis on capacity building and develop self-esteem of students.

The perception on quality education, presented by the officials of UN agencies was comprehensive. According to them, quality education is conceived as child-friendly education, which includes enrolment of students, high retention rate, high cycle completion rate, high achievement level and the holistic development of the children. This view, to a great extent, is related to efficiency of the school and qualitative change in the students' behaviors.

Based on the analysis and interpretation of the responses mentioned above, the policy level stakeholders perceived quality education in terms of mainly output of school education. Further to some extent the quality of education was also considered in terms of impact of school education on the daily life activities of the students.

Perception of Stakeholders of Practice Level on Quality School Education

The stakeholders of practice level can be classified into three different groups: (i) district level stakeholders - District Education Officers, SSs and RPs, (ii) school level stakeholders - Head teachers and teachers, and (iii) chairpersons and members of SMC, PTA and parents. The analysis and interpretation of their responses regarding perception on quality school education are presented separately in the succeeding paragraphs.

District Level Stakeholders

The perception of District Education Officers, SSs and RPs of all the sample districts on quality education was found to be more or less, similar. It is similar in the sense that some of them perceived quality education as accomplishment of learning outcomes mentioned in the curriculum, to a great extent, while some others viewed it as a better academic performance in school subjects. Both high degree of accomplishment of learning outcomes and better performance of students are related to the achievement level of the students. In addition to these perceptions, according to some stakeholders, education which helps the students to acquire life skills such as math skills, communication skills, skill-related to health and sanitation practices, skills related to local needs etc., is considered as quality education while the other stakeholders pointed out that such education which helps the students to solve their daily problems is viewed as quality education. These perceptions on quality education i.e. acquiring life skills, solving the daily problems and helping to run livelihood are interrelated. It is because the students will be able to solve their daily problems and to run their livelihood when they acquire life skills.

Moreover, an additional view on quality education, which was quite different from the above one was presented by DEO officials of Ilam. According to them, quality education does not mean only the higher achievement level at primary level but also the primary school graduates must demonstrate better performance at lower secondary grades.

Though the district level stakeholders, as mentioned above identified five aspects of quality education i.e. learning outcomes, performance of the students, life skills, problem solving skills, and livelihood, these aspects are related to two major aspects: achievement level and livelihood. Hence, in essence, the district level stakeholders perceived quality education as better output and positive impact of school education on the life of the students and better performance at lower secondary grades.

Perception of Head Teachers and Teachers on Quality School Education

Although the responses of HTs and teachers on quality education were found to be varied, these responses were related to six aspects of quality education: efficiency of the school, skills related to daily life, changes in socio-emotional behaviour, content based on the needs of learners and society, education which makes students disciplined, and exploitation of innate potentialities. All the HTs and teachers perceived quality education as efficiency of school, which covers high retention rate, high success rate and high achievement level, or high accomplishment of the learning outcomes. Similarly, according to them, such education is considered quality education if it can be applied in daily life. In other words, education should be useful for daily life and life-oriented. In addition to these views, some respondents perceived that education which changes the socio-emotional behaviour

of the students is quality education. However, according to some other respondents, education which makes students disciplined and moral, is perceived as quality education for which the content related to social values and norms need to be included in the curriculum. Still some other respondents tried to relate quality education with the nature of content. According to them, content should be selected and organized based on the needs and interests of the learners. Moreover, the content should be related to life skills such as 3Rs, health and sanitation practices, social skills, self-help skills, cooperation, adjustment among the peers etc. However, yet another groups of respondents in spite of emphasizing on content, stressed on exploitation of innate potentialities of the children. Some HTs and teachers viewed that the effective classroom teaching itself is conceived as quality education. They further stated that each child has his/her own innate potentialities and the task of education is to draw out these potentialities. This type of education, as perceived by them, is quality education.

While considering the analysis of the perception of quality education mentioned above, it was found that efficiency of the school, and knowledge and skills related to daily life were the common aspects of quality education. Regarding the other aspects of quality education, the perception of respondents differed. Thus it implies that quality is, generally, perceived as high success rate and high achievement level of students in schools.

Perception of Members of SMC/PTA and Parents

With a view to find out the perception of members of SMC/PTA and parents on quality education, FGDs along with parents held such programmes in all the sample schools. The summary of the FGDs on perception of quality education are analyzed and interpreted in the succeeding paragraphs:

In FGDs, most of the respondents viewed that school education can be qualitative if a large number of students come in higher divisions. This view states that students securing higher marks in each school subject, can be considered as quality education. It, indeed, is related to achievement level of students in school subjects. So, quality education refers to higher achievement level. Similarly, the next view given by the respondents is related with examination results, as the quality is equated with higher success rate of the students. The more success rate indicates the higher quality of education. Besides these views, the accomplishment of learning outcomes, which are mentioned in the curriculum, was also perceived as quality education.

The perception of some other members of SMC/PTA and parents on quality education which was different from the above ones was also found in FGDs. This view was directly linked with the content to be delivered to the school children. According to this view, life skill-oriented and practical oriented education is considered as quality education. Hence, if the education is to be made of good quality, the content should be useful to the daily life of the children and community. Moreover, the content of quality education should include social values, norms and moral education so that the students be morally and socially disciplined.

Similarly, one of the views on quality education emerged in FGDs was very general in nature and that was about changing the social and emotional behaviours of the students. In other words, quality education should enable the students to translate the knowledge and skills that they gain in the schools in their daily life activities and household works.

One of the aspects of quality education, as viewed by the respondents in FGDs, was teaching-learning process. According to them, the more effective the teaching-learning process is, the higher quality education results. For this, some specifically, emphasized on the child-centered method for quality education.

While considering aforementioned analysis, quality education covers several aspects such as content related to daily life, effective teaching-learning process, high success rate, high achievement level and change in socio-emotional behavior. Viewing these aspects from the system approach, quality education include quality inputs, effective process, high output and positive impact on student's life and community.

Comparison between the Perceptions of Different Stakeholders on Quality Education

Based on the analysis and interpretation of the perception of stakeholders of policy and practice levels on quality education, the following table is prepared which helps to compare their perception on quality education.

Table 4.1

Comparison between the Perceptions of Stakeholders on Concept of Quality Education

	Perception on quality education	Stakeholders of policy level	Stakeholders of Practice Level		
			DEO officials	Head teachers/ teachers	Members of SMC and PTA and parents
Input	Life-oriented and practical-oriented education				√
	Useful content in the curriculum	√			√
	Inclusion of social values and norms in the curriculum				√
	High enrolment	√			
	Content based on needs and interest of learners	√		√	
Process	Effective classroom teaching-learning process (child-friendly education)	√		√	√
Output	Higher accomplishment of learning outcomes mentioned in the curriculum		√	√	√
	High achievement level of students in different subjects	√	√	√	√
	High acquisition of life skills		√	√	√
	Making the students disciplined and moral			√	√

	Exploiting innate potentialities			√	
	High retention rate	√		√	
	High success rate	√		√	√
	Application of knowledge, and skills acquired in school in daily life activities	√		√	√
	Change in socio-emotional behavior of the students	√		√	√
	Satisfaction of learners and parents	√			
	Proficiency in Nepali and English language	√			
	Development of self-esteem	√			
	High cycle completion rate	√			
Impact	Demonstrating better performance in lower secondary school		√		
	Positive impact of school education on the life of the students		√		
	Running the livelihood of the students		√		

All the perceptions of different groups of stakeholders on quality education as presented in above table can be grouped into four major aspects such as input, process, output and impact. Of these four aspects, high output of school education was perceived as quality education by all the groups of stakeholders. Moreover, all the stakeholders except the district level stakeholders conceived input and process as two major aspects of quality education. One of the remarkable things from the above table is that the positive impact of education was also considered as quality education. Hence, quality education includes four major aspects such as input, process, input and impact. These aspects were similar to the quality indicators except system support indicators given in EFA-NPA Nepal 2001-2015, which was mentioned in Table 2.1 in Appendix-A. However, EFA-NPA Nepal 2001-2015 include output and impact under output and outcome indicators.

CHAPTER V

Basic Requirements for Quality School Education

Quality education is, by and large, determined by the basic requirements necessary for it. Educationists and agencies, as mentioned in Chapter II, identified various requirements for quality school education, such as curriculum and curricular materials, child-friendly physical environment, instructional materials, qualified and trained teachers, leadership of head teachers, regularity of students, class size, effective teaching-learning process, continuous assessment, active SMC and parental support. Of these requirements, some agencies emphasized on certain requirements while some other agencies gave emphasis on other requirements. Hence, this study tried to identify the basic requirements for quality school education. For this, different groups of stakeholders were interviewed to acquire data on basic requirements for quality education. These data are analyzed and interpreted under the following headings.

Adequate Number of Qualified and Quality Teachers

Survey data of sample schools revealed that these schools did not have minimum required number of teachers. In some schools, the number of teachers was found inadequate in terms of student-teacher ratio. For example, in a school of Banke, the STR was found high i.e. 86:1 vis-a-vis 50:1 as mentioned in EA and ER. In some other schools, the number of approved teacher positions was inadequate in terms of number of grades. In these schools, the teachers were managed by school's own source whereas in some other schools, teachers were managed through incentive teachers quota which is provided based on the number of students. However, there is confusion among the school teachers, whether such quota will be converted into permanent quota or not. This confusion had emerged because in some schools such incentive quotas were withdrawn.

Regarding the number of teachers, all the sample HTs and teachers stated that management of adequate number of teachers is a must to ensure quality school education. Adequate number of teachers, as they stated, were expressed in different angles. First, the government needs to create adequate number of teacher positions as per STR mentioned in EA and ER. Such responses were given by the HTs and teachers of those schools where there is excessive students. Similarly, this perspective on the management of adequate number of teacher positions based on STR was also supported by most of the district level respondents. Second, the meaning of adequate number of teachers for the respondents of some other schools was different from the above one. According to them, adequate number of teachers should be managed on the basis of the number of grades in schools. This type of responses was expressed by such HTs and teachers of the schools where there were grades I to V but the number of students was less than the STR specified in the EA and ER. The reasons behind this view, as they stated, were that most of the teachers were reluctant to conduct multi-grade/class teaching on the one hand and they, indeed, were not able to conduct multi-grade teaching in upper primary grades. Third, according to some district level stakeholders, the adequate number of teachers is required on the basis of the subjects to be taught in the schools. In this regard, they, specifically, stated that the schools need to have three categories of teachers: (i) Nepali and Social Studies Teachers, (ii) English Teachers and (iii) Mathematics and

Science Teachers. The provision of such categories of teachers would help make the teaching-learning process more effective.

One of the aspects related to teachers as a basic requirement for quality education is their qualification. Along with the responses on the adequacy of teachers, almost all the HTs, teachers and DEO officials strongly emphasized on the management of qualified teachers for quality education. However, the views of the stakeholders regarding the level of qualification of primary school teachers were found different i.e. SLC or Proficiency Certificate Level (PCL)/Higher Secondary Education. But, all of them were found to have agreed that all the teachers must possess minimum qualification as specified by the GON to ensure quality school education.

In order to ensure quality school education, all the teachers, as stated by school level respondents, must be competent and dedicated for running the classes regularly and for teaching any subject effectively. The same type of view was expressed by district level stakeholders. According to them, the teachers having positive attitude towards teaching, feeling of responsibility, pedagogical knowledge and ability to care children should be appointed for ensuring the quality school education. All these qualities must be possessed by quality teachers. Hence, in short, the school can provide quality education if it has adequate number of quality teachers.

The analysis made in above paragraphs reveals that the number of teachers in sample schools was inadequate in terms of either STR or number of grades. Hence, one of the basic requirements for quality education is adequate number of qualified and quality teachers in schools.

Teacher Training

Recent studies conducted by CERID; 2006, CERID 2005; and CERID, 2004 revealed that all the skills acquired by the teachers in the training were not found to have been transferred to the classrooms, as expected. However, several studies showed that the teaching performance of trained teachers was found better than that of untrained ones. This is because all the stakeholders emphasized on teacher training for improving quality education.

Regarding the trained teachers in all the sample schools, the number of trained teachers did not exceed 56 percent. In institutional schools, only 10 percent of total teachers were found trained. If the percentage of trained teachers is increased in institutional schools, their present status of education would certainly increase in terms of quality. Hence, all the stakeholders viewed that the more number of trained teachers in the school, the better will be the quality of education. So, they considered teacher training as one of the basic requirements for quality education. All the stakeholders agreed to provide two forms of the teacher training: (i) basic training and (ii) refresher training.

In addition to the types of training, the stakeholders also presented two different views regarding the nature of training. Most of the stakeholders emphasized on specialized training. These stakeholders realized that there should be a provision of subject-wise teachers and specific training in their own subjects for ensuring the quality school education. In this regard, some DEO officials, specifically, pointed out the need of three different packages for preparing three different groups of teachers: (i) English language, (ii) Mathematics and Science, and (iii) Nepali Language and Social Studies. But, some DEO officials and HTs did not agree with this view. According to them, PCL or HSE graduates do not need the training content, but they

need the training on pedagogy which is required for all subject teachers. Hence, the training, as they stated, should be of generalist type. No matter whether the training is generalist type, or specialist type, training should be need-based, school-based and practical oriented. As a result, the training skills can be transferred to the classrooms after their training.

It is clear from the above-mentioned discussion that basic and refresher training are the must for ensuring the quality education. Such training should be need-based and practical-oriented and it should prepare the teachers in their own subjects.

Physical Facilities

External and internal physical environments of the schools, directly affect the activities of schools. This fact was supported by a study undertaken by CERID, 2006(B). Physical environment is related to the availability of physical facilities. Hence, in order to ensure quality education, as stated by all the stakeholders, every school must have adequate physical facilities which include the number of classrooms, office room, store room, library, playground, toilets, drinking water, furniture, and compound wall. In relation to the above physical facilities, different groups of stakeholders presented different views on minimum requirements of these facilities for quality education. For example, some respondents considered drinking water as the basic requirement for quality education while other respondents did not accept it as the basic requirement under physical facility for quality school education. But they emphasized on toilets as the basic requirement for quality education. The views presented by them on each aspect of physical facilities as the basic requirement for quality education are analyzed and interpreted under the following headings.

Classrooms

Data on physical facilities of sample schools revealed that all of them had adequate number of classrooms as per grades and sections. Similarly, the height of classrooms was found adequate. All the classrooms were well ventilated and had adequate light for a blackboard for each student to read and write. The walls and floor of each classroom were plastered with cement. Moreover, the classrooms of grades I and II of 50 percent of sample schools were painted with alphabets, numbers, fruits, flowers and animals etc. and such decorations had made the internal environment of the classrooms attractive. Likewise, in these schools, subject-wise learning corners were arranged in the classrooms of grades I and II. Regarding the adequacy of the space in the classrooms in terms of the number of students two-third of the sample schools had adequate space for conducting activities in the classrooms.

In relation to the physical facilities, all the stakeholders viewed that adequate number of classrooms was considered as one of the basic requirements for quality education. Furthermore, each class, as they stated, must have adequate space to conduct the activities and to move the teachers and students freely. Similarly, the internal environment of the classroom should be attractive and child-friendly for which the classroom should be decorated with instructional materials. The HTs chairs and teachers of some schools further stated that the building should have Reinforced Cement Concrete (RCC) roof and the classroom should be well partitioned. This view was presented by the HTs and teachers of such schools where the buildings were roofed with corrugated sheets and the classrooms were not fully partitioned. Because of the corrugated sheets, the students experienced excessive heat in summer in Banke. In rainy seasons, the classes were disturbed due to rain.

Likewise, the activities in one class disturbed the adjoining class because the partition between these classrooms was not properly done.

As mentioned above, the successful schools had adequate number of classrooms as per grades and sections, and also the internal environment of classrooms was conducive for effective teaching and learning. Obviously, child-friendly classrooms are one of the basic requirements of quality education. Hence, an attractive environment of a classroom with adequate space and with adequate instructional materials is also considered as the basic requirement for quality education.

Sitting Materials

The teaching-learning process is affected by sitting materials and their arrangements. Sitting materials, which were adequate in all the sample schools include benches and desks; and/or single chairs and tables; and/or carpet and low-level tables. The classroom of most of the sample schools had benches and desks. But, one-fourth of the total sample schools managed carpet with low-level tables in grades I and II. This type of classroom management was found appropriate and comfortable in two ways: (i) classroom activities were conducted effectively, (ii) students were found to have rested whenever they needed, which was mostly needed for the students of the lower grades.

All the stakeholders opined from the same schools that one of the basic requirements under physical facilities is sitting materials. They recommended to manage carpets and low-level tables for grade I to III. However, benches and desks, according to them, should be managed in upper primary grades. But, they suggested that these furniture should be movable for managing different sitting arrangements as per the lesson and for applying different techniques of teaching. Hence, one of the basic requirements for quality education is adequate and appropriate sitting materials i.e. carpets and low-level tables in lower primary grades for the comfort of the students, and movable benches and desks in upper primary grade to change the sitting arrangements as and when required.

Toilets

Observation data on physical facilities revealed that the number of toilets was found inadequate in more than one-third of the sample schools. However, there were separate toilets for students and teachers in one-third of the sample schools. In some sample schools, there were no separate urinals for boys and girls. The observation data further showed that toilets in 15 percent of the sample schools were not clean due to lack of adequate water. These facts revealed that the school management of some schools did not give due priority to the toilets. This was the reason that some of SMC/PTA members of 50 percent of sample schools gave less emphasis on the necessity of toilets as a basic requirement for quality education. However, the remaining school level stakeholders considered the toilets as a basic requirement for quality education. This view was also supported by district level stakeholders.

Although toilets are not directly related to quality education, they indirectly affect the daily teaching-learning process as toilets are human needs. Hence, the necessity of toilets in schools was mentioned in national and international literature.

Drinking Water

Adequate drinking water was available in all the sample schools. Moreover, drinking water was medicated in four sample schools, and in two sample schools, filtered water was managed. In the remaining schools, the students used to drink water directly from taps and tube wells. Although drinking water was available in all the sample schools, more than 50 percent of the school level stakeholders did not realize that drinking water as a basic requirement for quality education. Though drinking water is not directly related to quality education, availability of drinking water affects the teaching learning process. It implies that availability of drinking water affects the quality of education, to some extent.

Play Ground

All the sample schools except one of Kavrepalanchowk had playground. The area of playground ranged from 1/2 ropani (4 Dhur) to 5 ropani (17 Kattha). It is difficult to state whether the area of playground is adequate or not as the EA and ER did not mention about it. But as per EFA-NPA Nepal 2001-2015, the area of playground should be 60m X 40m for 200 students. On the basis of this norm, 50 percent of the schools did not have adequate area of playground. Similarly, the playground of 50 percent of sample schools was not appropriate in terms of size, surface and cleanliness. Regarding the playground, only one-third of the school level stakeholders pointed out the need of playground for conducting extra-curricular activities and those activities, as they conceived, are a part quality of the education. Hence, they considered a playground as a basic requirement for quality education. But this opinion does not tally with those of the remaining stakeholders because they equated quality education only with the cognitive development of the children.

While considering the view of two groups of stakeholders regarding the necessity of playground mentioned above, the view of the first group of stakeholders was found to be justifiable if quality education is conceived as holistic development of the children. One of the aspects of holistic development is physical development for which playground is a must. Hence, a playground, as a basic requirement is essential for quality education.

Office Room

All the sample schools had an office room, which was also used as a staff room. In most of the schools, the office rooms were well equipped with necessary materials such as adequate furniture for teachers, shelves, display of different data related to SMC/PTA, teachers, students, and annual income and expenditure of the school. Each school, as stated by all the stakeholders, must have an office room, which can be used for conducting interaction among HTs, SMC, HT, teachers, chairperson/members of SMC/ PTA on improving the quality of education.

Instructional Materials

All the sample schools as shown by survey data had, more or less, similar types of instructional materials for all subjects. These materials, generally, are posters, charts, globe, clock, maps, geometrical instruments, pictures, etc. under *ready-made materials*; charts, clay materials, paper-made materials, cloth-made materials, flip chart, figures, cards etc. under *teacher/parent/student-made materials*; and lids of cold drinks, pebbles, sand, soil, plants, pieces of bamboo, wood and cane etc. under *locally available*

materials. Some of these materials were displayed in the walls of classrooms, some were displayed in learning corners and some were found to have been stored.

All the stakeholders, as they stated, realized the necessity of instructional materials for teaching-learning process. Among the different types of instructional materials, some stakeholders emphasized on the use of locally available materials. Similarly, some other stakeholders recommended to use the teacher/parent made materials for which they should be trained. This type of response was presented by HTs and teachers of such schools, where teachers used to prepare instructional materials. In one of the sample schools, teachers took even the help of parents for preparing instructional materials. Hence, this school had adequate number of instructional materials. Similarly, all the stakeholders stated that each school must have ready-made materials, which are demanded by the content but cannot be prepared locally. Hence, most of the HTs of community schools suggested to make a policy on the provision of budget for ready-made instructional materials in terms of number of students in the school.

Although the different stakeholders gave priority to different types of instructional materials (locally-available, locally-prepared and ready-made), the reasons for the necessity of instructional materials presented by them were found, more or less, similar. These reasons can be classified into two groups, which are as follows:

Reasons related to teaching:

- For teaching in a practical way
- For motivating the students
- For making teaching child-centered
- For clarifying the concept easily
- For making the teachers active and creative
- For making the teaching pleasant
- For providing opportunity in using training skills

Reasons related to learning:

- For making the learning joyful
- For making the learning long-lasting
- For making the students understand the concept easily
- For helping student to learn practically
- For helping in quick-learning

The reasons for necessity of instructional materials mentioned above were related to the improvement of teaching of the teachers and enhancement of learning of the students. Hence, the instructional materials are the basic requirements of quality education.

Monitoring and Supervision

One of the factors that determine effectiveness of teaching-learning process is monitoring and supervision. But the monitoring and supervision of schools by RPs/SSs seemed to be very poor (METCON, 2003). In case of sample schools, monitoring and supervision was found to have been undertaken by HTs and/or SMC chair and/or RP/SS.

The frequency of monitoring and supervision in these schools by SMC chair was found to have ranged from 12 times in a year in a school of Kavre to every alternate day in a school of Banke. It shows that SMC in all sample schools were active. On the contrary, SMC and PTA were formed just for fulfilling a formality in institutional schools and hence, they hardly monitor and supervise the school. Monitoring and supervision was, generally, done by HTs in all schools. The frequency of such monitoring and supervision was more in institutional schools (private schools) than in community schools (government-supported schools). One of the remarkable practices in monitoring and supervision was mutual classroom supervision by peers in order to identify the strengths and weaknesses of teaching for the purpose of improving their teaching-learning process.

However, the monitoring and supervision by RP/SS was found to be low i.e. 2 to 3 times in a year. Such monitoring and supervision was found to have been done only in 50% of the total sample schools and was only limited to school visit and interaction with the HTs about administrative matters. Hence, the monitoring by RP/SS was not found fruitful for improving the teaching performance of the teachers. For this purpose, monitoring and supervision by RP/SS, as stated by all the stakeholders, should be done for improving the quality of school education. In this regard, District Education Officer and HTs further stated that RC should be developed as a technical wing of DEO and RPs should be made responsible for providing technical support to the teachers of their satellite schools. RCs, indeed, were established as a technical wing and the position of RP, were created for the purpose of providing technical support to the teachers on the one hand and on the other, the respondents were demanding the same support from RC and RP respectively. It reveals that RC and RP were not working well for which RCs were supposed to be created and so are RPs. Hence, in order to provide the technical support of RPs to school and teachers, DEO should manage accordingly.

All the stakeholders agree on the fact that though the classroom supervision by the RPs could help the classroom performance of the teachers, such supervision will not be adequate as a RP needs to cover several schools assigned to him/her. Hence, the monitoring and supervision of schools should be done by HTs and SMC for which training for them is required. Moreover, classroom supervision, as stated by some HTs and teachers, should be done by peers for sharing their teaching skills.

Whether monitoring and supervision of schools are done by district level officials or school level stakeholders, as stated by them, the monitoring of the schools increases the regularity and punctuality of teachers and helps to make the provision of rewards and punishment of the teachers. Likewise, classroom supervision by HTs, peers and RP/SS should be conducted to provide technical support. As a result, regularity and punctuality of teachers and technical supports given to them help improve teaching-learning process which is directly related to quality education. It is in this context, monitoring and supervision by the RPs, HTs, SMC members and teachers themselves can be considered as a basic requirement for quality education.

Teaching-Learning Process

Literature shows that the greater the children are involved in teaching-learning process, the more they learn. Hence, educationists stressed such type of teaching-learning method in which the students' can be involved in different activities.

Similarly, all the HTs, teachers and district level officials suggested to use child-centered teaching strategy for effective teaching-learning process. Some of the stakeholders, specifically, pointed out that the activity-oriented teaching-learning process is appropriate in primary grades for which adequate instructional materials should be managed. For making teaching learning process activity-oriented, as suggested by RP, and HTs, project work/teaching through group formation and role-play methods need to be adopted. A few teachers recommended to apply grade-teaching in lower primary grades for effective teaching. This view was presented by the teachers of those schools where grade-teaching was in practice. But this view was not accepted by most of the HTs and teachers. Some HTs and teachers viewed that there should be a provision of remedial teaching for weak students.

Survey data of all the sample schools showed that child-centered teaching method was being used in the lower grades of most of the sample schools. In these schools, students were split into different groups and each group was assigned to conduct an activity to ensure more participations of the students. So, students were found to have directly involved in teaching-learning process.

Related literature, observation data and responses of the stakeholders mentioned above reveal that child-centered teaching is required in order to make teaching-learning process effective. It is in this context, the teaching-learning process i.e. child-centered learning strategy is considered as one of the basic requirements of quality education.

Continuous Assessment of Students

Continuous Assessment System and Liberal Promotion Policy were implemented in some districts of the country. One of these districts was Ilam which was a sample district of this study. But this system was not found to have been continued during field visit. However, out of 16 sample schools, 12 schools were found to have assessed the students continuously which was different from the one mentioned above. In these schools, apart from terminal examinations, students were assessed on the basis of class work, homework, class activities, unit test and monthly tests. Right after each assessment, the teachers used to provide feedback to each student. Moreover, individual folder of each student was maintained for keeping the record of students' progress in five sample schools. In these schools, parents were invited for reporting the progress of their children. The success rate of students in these schools was found comparatively higher than in other schools.

Since continuous assessment of students increases the success rate and achievement level; helps increase regularity and punctuality of the students; increases interaction between parents and teachers; helps manage remedial teaching for needy students, all the stakeholders suggested to adopt it. These respondents prescribed various devices for assessing the students' progress continuously. These devices can be categorized into four groups: (i) Written tests such as unit tests, weekly tests, monthly tests, and terminal examinations, (ii) class work and class activities, (iii) home work, and (iv) observation of socio-emotional behavior. Moreover, in order to make continuous assessment of students more meaningful, individual folder, as

stated by 50 percent of the HTs and teachers, should be maintained. This view was also supported by district level stakeholders. They further stated that the teachers need to provide feedback to each student immediately after each assessment and invite the parents to report the progress of their children in each terminal examination.

Since continuous assessment of students, in one or another way, was using in majority of sample schools, it helped improve the learning of the students and teaching of the teachers. Similarly, all the stakeholders were in favour of continuous assessment of students for quality school education. In this context, continuous assessment of students needs to be taken as a basic requirement for quality education.

Effective Leadership of Head Teachers

In all the sample schools, classroom supervision was done by HTs and they used to provide feedback to the teachers as mentioned in above section. In these schools, meetings were held frequently. In a sample school of Kavre, teacher's meeting was held for fifteen minutes every day at the end of teaching hours under the leadership of HT with a view to identify the problems related to teaching-learning and to solve them.

Similarly, the HTs as a member-secretary of SMC organized SMC meeting from time to time in all the sample schools. In the same way, PTA meetings were held as and when required, for which the role of HTs was found crucial. All these facts reveal that the leadership of HTs of sample schools was found effective. Because of effective leadership of HTs, as stated by teachers and SMC/PTA members, internal and external physical and learning environments of the schools were better, class occurrences were regular, success rate was high, community support was highly appreciable etc. Hence, these respondents stated that the leadership of HTs should be effective to ensure quality of school education. This view was substantiated by officials of district level officials. Considering all these facts, it can be concluded that effective leadership of HTs is required in order to ensure quality education.

Active SMC and PTA

In order to ensure the quality of school education, as stated by school and district level stakeholders, there should be active SMC and PTA. According to them, the school can run effectively if it receives community support (such as materials and labour donation for developing physical facilities and their regular maintenance, financial support etc.). It is possible only when SMC and PTA will be active. This is because they work as liaison between school and community.

The Monitoring of school is one of the factors, which determines the effectiveness of the school. In this regard, all the stakeholders do not expect frequent monitoring from RPs/SS and hence, the monitoring of schools, which helps increase the regularity of teaching and class occurrence, should be done by SMC and PTA for which they should be active.

In order to ensure the quality education, the schools must have qualified and competent teachers. The role of SMC in selecting such teachers is crucial as per EA and ER. For this, all the stakeholders viewed that SMC should be active. Furthermore, majority of district level stakeholders viewed that SMC and PTA should be constituted with active members in order to make transparency in

financial matters and to make a provision of reward and punishment for the teachers. The SMC and PTA, as stated by some district level stakeholders, will be active if they are involved in decision-making process. In this regard, all the SMC and PTA members in FGDs demanded such training which make them aware of their rights and duties.

Survey data of sample schools show that all of them had adequate classrooms and other physical facilities. For the development of such physical facilities, as stated by HTs and teachers, the role of SMC and PTA is crucial. In these schools, meetings of SMC were held frequently and monitoring was done regularly. These facts reveal that SMC was found active in sample schools.

The aforementioned discussion reveals that because of active SMC, the sample schools had adequate physical facilities, teachers were regular in these schools, community support was satisfactory, relationship between school and community was better, financial transparency was maintained etc. Hence, active SMC and PTA are considered as a basic requirement for ensuring quality of school education.

Textbooks and Teacher's Guides

Regarding the textbooks and TGs as basic requirement for quality education, as stated by the stakeholders, two views appeared. First, textbooks and TGs need to be made available on time in schools i.e. right before the academic session. These textbooks should be distributed to each student on the day of *Welcome to School Programme*. This view was presented by the HTs and teachers of such sample schools where the textbooks were delay received.

Second, the textbooks for primary grades, as stated by majority of schools and district level stakeholders, should be child-friendly. The qualities of child-friendly textbooks, as they stated, were: inclusion of pictures, appropriate size of letters, simple and attractive illustration, inclusion of content based on needs and interest of the students, appropriate vocabulary according to age level, adequate exercises etc. The similar type of qualities of child-friendly textbooks was recommended by a study undertaken by FEDUC, 2005. Besides the qualities of child-friendly textbooks mentioned above, the qualities recommended by this study were adequate exercises and instructions to the teachers in each lesson which work as.

In order to help the teachers to teach effectively, as stated by some stakeholders, TGs should be prepared for each subject. Training should be organized at RC level to enable them to use TGs effectively. With a view to ensure the use of TGs in an appropriate and effective way, the HTs and RPs need to monitor from time to time.

CHAPTER VI

Norms and Standards of Quality School Education

This chapter has two major sections. The first section deals with the bases for developing norms and standards of quality education. The second section is related to the development of norms and standards for school monitoring.

Bases for Development of Norms and Standards of Quality Education

With a view to assess and ensure quality education, norms and standards for each of the requirements mentioned in Chapter V should be established. These norms and standards must be observable, measurable, attainable, and implementable. The norms and standards of quality education were found in different documents as mentioned in Chapter II. Some of them were well defined and specific and hence, they are measurable and implementable. However, some others were stated in general term. As a result, they could not be used as norms and standards for school monitoring. Similarly, these norms and standards did not cover all the aspects of each requirement for quality education. Hence, a separate norms and standards of quality education for school monitoring has not been developed yet. In order to develop norms and standards for school monitoring, first, bases for developing these norms and standards must be identified. For this, data were collected from three sources: (i) review of related literature, (ii) survey of successful schools, and (iii) opinions of stakeholders of policy and practice level. These data are analyzed and interpreted under the three major headings: *Input, Process* and *Output*.

Input-related Norms and Standards

Norms and standards related to teachers, physical facilities, instructional materials, textbooks, TGs and budget come under input. The description of each of them is presented below.

Teacher-related Norms and Standards

The norms and standards related to number, qualification and training of teachers are briefly explained under their respective headings.

Number of Teachers

The number of teachers required for each school depends on the norms related to student-teacher ratio (STR) determined by the GON. In this regard, the report of NNEPC, 1956 recommended that the STR be 30:1. But the STR should be 40:1 as suggested by HLNEC, 1998. This STR was different from that stated in EFA NPA-Nepal 2001-2015, which was 25:1 in grade 1 and 30:1 from grades II to V. However, the present STR mentioned in EA and ER was found different for different ecological belts, i.e. 40:1 in Himal, 45:1 in mountain and 50:1 in Terai. These STRs could be considered to be high if they were compared with the opinions regarding the STR presented by HTs, teachers and district-level stakeholders. The STRs suggested by these stakeholders ranged from 20:1 to 40:1. However, the number of respondents who opined that the STR should be 40:1 was a few i.e. 16%. The responses related to STR given by the HTs and teachers were based on the number of students in their own schools. It is because in most of schools, the STR did not exceed 30:1. While analyzing school-wise, the highest STR i.e. 86:1 was found in a school of Banke and

the lowest i.e. 17:1 in a school of Ilam. The district-wise average STR was 40:1 in Ilam, 34:1 in Kavre, 23:1 in Kaski and 64:1 in Banke.

Regarding criteria for determining the number of teachers, the HTs of the schools where the number of students was less, had different views. According to them, the number of students in the schools of mountain and hills, is low on the one hand and the teachers are reluctant and not competent in conducting multi-grade/class teaching on the other. Hence, there should be a provision of one teacher for each grade irrespective of STR. Moreover, the subjects to be taught should also be considered while fixing the number of teachers in each school.

The above-mentioned facts and opinions reveal that STR mentioned in EA and ER could be considered high while comparing these STRs with the STRs mentioned in HLNEC, 1998 and in EFA-NPA Nepal 2001-2015; with the STRs of sample schools and with the STRs suggested by HTs and teachers. Moreover, the STR mentioned in different documents was 40 or less than 40:1. Hence, the STR should be 40:1. This ratio needs to be decreased for the schools of mountain and Himal as there are less students than in the schools of Terai. It implies that if the present STR in EA and ER was reduced from 50:1 to 40:1, it would, certainly, help to ensure quality education by making teaching child-centered and by using continuous assessment of students. So, the number of teachers in each school where the number of students is high, should be determined on the basis of STRs and the number of teachers in the schools where the number of students is less, should be determined based on the number of grades/sections.

Qualification of Teachers

In SAARC countries like Bangladesh, India, Pakistan and Sri Lanka, the minimum qualification for a primary school teacher is intermediate level (Malla et. al. 1998). In Nepal, HLNEC, 1998 suggested Proficiency Certificate Level (PCL)/Higher Secondary Education (HSE) is to be made as the minimum qualification for a primary school teacher. The same suggestion was suggested by BPE Master Plan, 1997. Shrestha, 1997 stated that the GON should give a thinking on raising the minimum qualification of a primary school teacher from SLC to PCL in a phase-wise manner. This is because the teaching performance of the teachers with PCL was found better than that of the teachers with SLC. Despite the suggestions mentioned above, the minimum qualification for primary school teachers, as mentioned in Teachers Service Commission Regulations (TSCR), 2000 is still SLC. However, EFA-NPA Nepal 2001-2015 and EFA 2004-2009, Core Document recommended that the minimum qualification for a primary teacher should be HSE or equivalent to PCL.

The suggestions mentioned above i.e. PCL or HSE as minimum qualification to be a primary school teacher was also supported by most of the HTs and teachers by all the sample schools and district level stakeholders. There were three main reasons behind this view. First, all the stakeholders realized that the teachers with only SLC have experienced difficulty in teaching English, Mathematics and Science at upper primary grades and hence, they strongly recommended to appoint the candidates with PCL. Second, though the provision of appointing candidate with PCL or HSE for the primary school teachers is made, there will not be the lack of such candidates as Higher Secondary Schools are being run in different parts of the country. Third, majority of the working teachers had PCL. This fact was also supported by survey data because it showed that 72% of the primary teachers of sample schools had PCL or above.

Some of the stakeholders, specifically, recommended to appoint the candidates with PCL/HSE in education for the primary school teachers. The main reason behind this view is that the existing ten-month basic training is not required for PCL/HSE holders as they have already acquired both content and teaching skills. As a result, classes will be regular as the teachers need not go to basic training of long duration. The next reason presented by some of the stakeholders was that the PCL/HSE graduates had pedagogical skills and knowledge of child psychology, which are essential to be a teacher. Moreover, HSE graduates in education are easily available as the number of HSSs with education stream was more than others with other streams.

The above-mentioned discussions reveal that education commission reports, study reports and EFA-NPA Nepal 2001-2015 recommended the qualification of PCL/HSE for primary school teachers. Similarly, almost all the stakeholders presented the same view as mentioned above. Moreover, three-fourth of the primary school teachers had the qualification of PCL/HSE. The teachers having SLC themselves realized difficulty in teaching in upper primary grades. Considering all these realities, the minimum qualification for the primary school teachers must be increased from SLC to PCL/HSE in education or PCL in any subject with basic training prescribed by the GON.

Basic Training

Wagle, 2006 identified several professional qualities which were included under teacher standard. These qualities were (i) active pedagogue instead of passive disseminator of contents from the text, (ii) resourcefulness (indepth understanding of knowledge about the educational environment, (iii) awareness of their roles and functions, (iv) professional commitment and job motivation, and (vi) innovative. Such qualities among the teachers can be developed through training. In this regard, HLNEC, 1998 and EFA-NPA Nepal 2001-2015 suggested to make 10 months basic training mandatory for the primary school teachers. In line with this, the TSCR made 10 months teacher training mandatory to be a permanent primary school teacher for SLC holders. However, this type of training is not required for the teachers with the qualification of PCL/HSE in education as they are considered as trained teachers.

The views regarding the duration of basic training for the primary school teachers were found different. Most of the HTs, teachers and district level stakeholders viewed that the duration of basic training should be of 10-months. But a few teachers with SLC expected to have a training of 18 months with adequate content of the subject they have to teach as they felt difficulty in teaching at upper primary grades. The basic training of one to two months, as viewed by district level stakeholders, is adequate for the graduates of PCL and HSE in education. As they stated, there are three main reasons behind this view. The graduates of PCL and HSE in education have already acquired content to be taught in primary grades. Second, the class teaching will not be hampered if the duration of training is short. Third, the short-term training will decrease the expenditure of the government. Whatever may be the duration of training, the teachers, as stated by almost all the stakeholders, need to acquire training prior to entry in the teaching job.

Survey data of sample schools showed that the teachers with PCL in education received first phase i.e. 2.5 months of the basic training whereas some other teachers with PCL in education and B.Ed. received all the phases of basic training i.e. 10-months though the teachers with such qualification did not require the training as

mentioned in TSCR. However, in some cases, the teachers with PCL in education and B.Ed. were not provided the basic training as the concerned officials did not realize the need of training for them. Survey data further showed that 45 percent of the teachers of sample schools, on the whole, received 10-month basic training.

While considering the facts and views mentioned above and the qualification of teachers mentioned in earlier section, the duration of basic training for the teachers with the qualification of PCL/HSE in the subjects other than in education should be of 10-month because of four reasons. First, the duration of training should be adequate for providing pedagogical knowledge and skills. Second, most of the stakeholders also realized the need of a long duration of training to make their teaching effective. Third, 10-month basic training has also been recommended in different documents published by the GON. Fourth, the duration of existing primary teacher training is of 10 months. However, the teachers with PCL/HSE in education do not require a basic training because of two main reasons. First, PCL/HSE holders in education have already acquired pedagogical knowledge and skills. Second, PCL/HSE in education are recognized as basic training for the primary school teachers.

Refresher Training

All the stakeholders, as mentioned in Section 5.2, realized the necessity of refresher training, at least, once a year, which should be conducted at the beginning of academic session. However, their views regarding the duration of refresher training was found different. Some stakeholders viewed that its duration should be, at least, 3 days while some other suggested 7 days. But, majority of them recommended that the duration of refresher training be 4 or 5 days.

The duration of refresher training depends on the needs of the participants and hence, the duration, indeed, may differ from time to time and place to place. So, the duration of refresher should be of at least 3 days. For this, the training time should be used optimally thereby avoiding formal opening and closing sessions. Regarding the venue for conducting such training, Resource Centres (RCs) need to conduct subject-wise training whereas in-house training should be organized at school level. Both types of training should be designed based on the needs of the teachers which should be conducted by HT, RP, retired effective teachers, local educationists, etc.

Criteria for Appointment of HT

The extent of efficiency and effectiveness of school depends on the leadership of HT. In this regard, Wagle, 2006 identified the leadership standards which included visioning the standard, setting commensurate values to translate the vision, building team spirit among the stakeholders, introducing innovation to optimize achievement, expanding knowledge-base through establishing access to the sources of knowledge, expanding opportunities and initiating meaningful negotiations to exploit them, mobilizing resources and building and expanding networks for greater advantage. These standards are closely related to qualification, experience and training. This might be the reason that EA and ER and EFA-NPA Nepal 2001-2015 made qualification, experience and training as three main criteria for the appointment of HTs in schools. The data in these aspects are analyzed and interpreted under their respective headings.

Qualification: Though the minimum qualification required for a HT of primary school as mentioned in TSCR, 2000 was SLC, the qualification of HTs of 50 percent of

sample schools involved only primary grades was PCL or above. As viewed by all the HTs and teachers, the minimum qualification for HT of a primary school should be PCL or above. Moreover, two-third of them viewed that the minimum qualification for HT should be Bachelor's Degree. This view was reasonable in the sense that HTs, as mentioned in EFA-NPA Nepal 2001-2015, are required to conduct in-house training for teachers whose qualification should be of PCL and hence, priority should be given to the teachers with Bachelor's Degree for HT. This requirement is in conformity with the minimum qualification for a HT as recommended by School Sector Reform, Core Document: Policies and Strategies, MOES, 2007.

Teaching Experience: Teaching experience, as stated by all the stakeholders, should be considered as one of the criteria for appointing HT. Two-third of them were of the view that the minimum teaching experience for HT should be of 5 years, but the remaining stakeholders viewed that it should be 10 years or above. Similarly, the teaching experience of HTs of all the sample schools, as shown by the survey data, was found to be 16 years or above. Again, 10 years of teaching experience of a HT of a primary school has been specified in EA and ER. Considering all these facts and views, 10 years of teaching experience for the appointment of HT of primary schools is justifiable as the HT needs to a play leading role in the school.

Management Training for HTs: A provision of one-month management training for HT was mentioned in EFA-NPA Nepal 2001-2015. Similarly, all the HTs realized the need of management training along with basic and refresher training. Of these HTs, majority of them received the management training. It is in this context that one of the points to be included in norms and standards for school monitoring should be the management training of HTs. This is because, in the present context, a HT must have the knowledge and skills on preparation and implementation of SIP and annual action plan, ways of community mobilization, ways of resource collection and mobilization, organizing SMC meetings and community gathering, monitoring and supervision, application of computer, etc.

Physical Facilities-related Norms and Standards

An attempt has been made to develop the bases for determining the norms and standards for each aspect of physical facilities on the basis of analysis and interpretation of the opinions presented by the different groups of stakeholders, survey data of sample schools and review of related literature.

Land

The area of land required for a school was given in the NNEPC, 1956, and EA and ER. In NNEPC, 1956, it was mentioned that the school should have 3 acres (12207 sq.m.) of land for 300 students. However, the area of land mentioned in the EA and ER was found less (i.e. 10,173 sq.m.) than the area mentioned in the NNEPC. In this regard, different stakeholders presented different views on area of land required for a school. The area of land, as viewed by the HTs and teachers of sample schools, ranged from 763 sq.m. (1.5 ropani) to 5,086 sq.m. (10 ropanis). However, most of them recommended that the minimum area of land for a primary school should be 2035 sq.m. or 2543 sq. m. (4 or 5 ropanis). This area was similar with the available land in the majority of sample schools because these schools had 2035 sq.m. or more than 2035 sq.m. of land.

The area of land required for a primary school, indeed, is determined by the number of students. If a primary school with grades I to V has five classrooms and each class has the maximum of 40 students, the school will have 200 students for which at least 2035 sq.m. of land is required. This area of land could be considered justifiable because the majority of sample schools, which were identified as successful schools in their respective districts, had 2035 sq.m. of land. Similarly, the same area of land was also recommended by most of the HTs and teachers of sample schools.

Number of Rooms

A primary school should have rooms for different purposes such as classrooms, office room, library room, computer room, store room, hall, laboratory and room for indoor game. In the Nepalese context, a school might not have all these types of rooms. Even the successful schools did have all these rooms. However, a primary school must have, at least, classrooms and office room, as stated by all the stakeholders. As they stated, there should be maximum of 40 students in each grade/section and there should be one classroom for each grade/section. The survey data also showed that each of the sample schools had adequate classrooms in terms of number of grades/sections. Hence, there should be one classroom for one grade/section to ensure quality education. Moreover, all the sample schools had a separate office room. The necessity of office room was also realized by all the stakeholders for interacting among the HT and teachers, for displaying official information, for sitting during leisure time and for conducting meetings. Hence, each school must have a separate office room.

Classroom Space

The norms and standards of classroom space need to be considered for quality education. In this regard, NNEPC, 1956 recommended 9 sq.ft. per each student for classroom space. Similarly, classroom space of 0.75 sq.m. per each student in primary schools was mentioned in EA and ER. But almost all the stakeholders viewed that 1 sq.m. of classroom space is required for each student in order to carry out classroom activities easily and comfortably. Survey data of sample schools also showed that the area of classroom in each sample school was found adequate. However, in some sample schools of Banke, the space in some classrooms was not adequate as per this norm because of higher number of students.

Light and Ventilation

As mentioned in EA and ER, each school must have adequate light in each classroom for reading and writing in the board, and individual copies of the students. Similarly, ventilation is required in each classroom for circulation of air. As per school data, all the classrooms of sample schools had light and ventilation. Hence, while developing norms and standards under physical facilities, light and ventilation in the classrooms should be considered.

Classroom Environment

Based on the observation of sample schools, the classroom environment includes wall painting, learning corners, display of materials and sitting arrangement. The description of each of them is separately presented.

Wall Painting: The walls of classrooms of grade I and II of all sample schools were painted with English alphabet, Nepali alphabet, numbers, animals and fruits, birds

etc. Such wall painting, as realized by all the stakeholders, is required in order to make the classroom environment attractive. So, the norms and standards of classroom environment should include the wall painting in lower primary grades.

Learning Corners: Survey data showed that one-fourth of sample schools had managed learning corners in grades I and II. Such learning corners, as stated by majority of the stakeholders, need to be managed in the lower grades of primary schools for self-learning of students, for collecting the required materials to be displayed in learning corners and for making the classroom attractive. This provision was also mentioned in EPA-NPA Nepal 2001-2015. Some of the stakeholders did not realize the necessity of learning corners because of two main reasons. First, adequate space may not be available to manage learning corners for each subject. Second, subject-wise display of materials in separate learning corners is not required. While considering the views of majority of the stakeholders, provision of learning corners mentioned in EFA-NPA Nepal 2001-2005, display of learning corners in the classrooms of lower grades of successful schools, it is justifiable to manage learning corners in the lower grades of primary schools.

Display of Materials: Besides the materials displayed in the learning corners, materials such as posters, charts, job responsibility chart for students, annual teaching plan, weekly schedule and teacher/student-made materials were found to have been displayed in the walls of classrooms of sample schools. As viewed by all the stakeholders, the display of such materials is necessary for making the classroom attractive, for helping students to learn, for helping the HT to monitor the progress of teaching through annual teaching plan and for assigning students different jobs to be performed. Considering the advantages of display of materials, the norms and standards of classroom environment should include the display of materials.

Sitting Arrangement: Based on analysis and interpretation made in section 5.3.2, sitting arrangement can be managed in two different ways. First, carpet and low-level tables should be managed in lower grades of primary schools. This type of sitting arrangement is advantageous for comfortable sitting, and resting as and when the children need and conducting activities freely. Second, the classrooms of upper grades should have movable benches and desks which help to manage sitting arrangements in different shapes such as U, square, V, circle, etc. So, these two ways of sitting arrangements need to be considered while developing norms and standards under classroom environment.

Considering different aspects of classroom environment, the classroom environment of lower grades of most of the sample community schools was attractive. The classroom environment of grades I and II of a sample school is presented in the following box.

Box 1
Classroom Environment

Naveen Primary School, Bhakundebesi VDC, Kavre had classrooms with adequate space for grade I and II to carry out the activities individually or in groups. The floor of each classroom was furnished with carpet, mats and low-level tables. Subject-wise learning corners were managed in the classroom with adequate ready-made, teacher-made and student-made materials. Besides these materials, walls around the classroom three feet above the floor were used as blackboard for writing purpose to the students. Various types of materials useful for both students and teachers were displayed on the walls. Some of these materials were student's bags with personal belonging, job responsibility chart for students, attendance report of students etc

Drinking Water

While considering the fact mentioned in EA and ER, the opinions of the stakeholders, provision of drinking water in sample schools, which has already been analyzed and interpreted in Section 5.3.4, two factors should be considered for developing the norms and standards regarding the drinking water facility. First, each school must have managed drinking water. Second, the drinking water should be safe for which it must be either filtered or medicated.

Toilets

One of the requirements for quality education as mentioned in Section 5.3.3, is toilet and hence, EA and ER mentioned about separate toilets for teachers and students, and separate toilets for boys and girls. Regarding the number of toilets, there should be one toilet for 200 students whereas EFA-NPA Nepal 2001-2015 recommended one toilet for 50 students (both boys and girls). Regarding the number of toilets, the views of stakeholders were found to be different. Some stakeholders viewed that there should be one toilet for 20 students whereas other stakeholders suggested one toilet for 30 students. But the stakeholders who suggested one toilet for 50 students was more in number. All the stakeholders, however, stressed the need of separate urinals and toilets for students and separate toilets for teachers. While considering these facts and views, separate toilets for teachers and students and separate toilets for boys and girls need to be managed. Similarly, there should be one toilet for 50 students as this ratio was suggested by most of the stakeholders.

Instructional Materials

In order to improve the teaching-learning process, instructional materials, as mentioned in EFA-NPA Nepal 2001-2015, should be appropriate for all the school subjects. Moreover, this document recommended two computers as instructional materials for different schools. The instructional materials required for different subjects are mentioned in TGs published by CDC. The necessity of these materials was also realized by all the HTs and teachers. These materials could be classified into three groups: ready-made, locally prepared and locally available materials. These three types of instructional materials must be managed by each school for ensuring quality education. Hence, while developing norms and standards related to input, instructional materials should be considered.

Play Materials

Play activities are to be carried out for physical development of the students, as one of the aspects of holistic development for which play materials are essential. In this regard, NNEPC, 1956, recommended swing, slide, jungle-gyms, teeter-rotters, football, volley ball and cricket as basic play materials for primary schools. Though EA and ER did not specifically mention the list of play materials, it gave emphasis on play materials for physical development of the students. Realizing the necessity of play materials all the HTs, teachers and DEO officials identified the play materials required for a primary school. Similarly, during school visit, the list of instructional materials available in sample schools was also collected. The list of materials identified by the stakeholders and available in the sample schools are presented in the following table.

Table 6.1
List of Play Materials

S.N.	Name of the play materials	Identified by the stakeholders	Available in the school
1.	Ball	✓	✓
2.	Skipping	✓	✓
3.	Ring	✓	✓
4.	Badminton	✓	✓
5.	Swing	✓	✓
6.	Slide	✓	✓
7.	See-saw	✓	✓
8.	Carom Board	✓	✓
9.	Ludo	✓	✓
10.	Chess	✓	✓
11.	Puzzle game	✓	✓

As shown in Table 6.1, the stakeholders identified altogether 11 play materials as the basic requirement for a primary school. The first 7 in the table are external play materials and the remaining are internal play materials. Survey data showed that most of those materials were available in majority of the sample schools.

Considering the suggestions of NNEPC, 1956, opinions presented by the stakeholders and types of available play materials in the sample schools, norms and standards for play materials should be developed.

Distribution of Expenditure

One of the bases of assessing the extent of quality education is expenditure pattern in different headings. The expenditure in the headings like instructional materials, play materials, refreshment for meetings, co-curricular and extra-curricular activities, scholarships, repair and maintenance along with salary and allowance of the teachers is related to quality education. Hence, analysis of expenditure pattern in these headings is required. In this regard, the amount of expenditure in salary and allowance of teachers should be 70 percent of total school budget as mentioned in EA and ER, and HLWCSE, 2001. Similarly, more than 10 percent of school budget

should be expended each in the headings of co-curricular and extra-curricular activities instructional and play materials, and repair and maintenance.

Survey data showed that the allocated budget was found to have been spent in different headings such as salary, instructional materials, co-curricular activities, repair and maintenance along with other headings. The expenditure on each heading of the budget of each school was found different. The minimum expenditure on salary was found to be 40 percent in a school whereas the maximum expenditure in the same heading was 91 percent in the next school. However, the expenses on salary in majority of schools lied between 60 to 80 percent. These facts were similar with the opinions presented by different stakeholders. According to some of them, the allocation of budget to salary should be about 50 percent of the total budget whereas this percentage, as stated by some others, should not exceed 80 percent of the total budget. Regarding the allocation of budget in different headings except salary, most of the stakeholders gave more emphasis on instructional materials and co-curricular activities and less on administrative costs.

The percentage of budget allocated to salary depends upon the number of headings for which the budget needs to be allocated. For example, if budget for scholarships and textbooks are included in the total budget, the percentage of budget allocated to salary will be low. Moreover, the budget for different headings may differ from school to school, which creates difficulty in determining the exact percentage of budget for salary and other headings. Hence, for the sake of convenience, four headings such as salary, instructional and play materials, co-curricular and extra-curricular activities and repair and maintenance should be considered while allocating the percentage of budget for developing norms and standards for expenditure.

Allocating 70 percent or less than 70 percent of the total budget to salary can be considered justifiable on three grounds. First, as mentioned above, EA and ER and HLWCSE recommended to allocate 70 percent of the total budget for salary. Second, the expenditure for salary in majority of sample schools was found to be around 70 percent. Third, majority of the stakeholders suggested to allot about 70 percent of the total budget for it. Similarly, since instructional and play materials, co-curricular and extra-curricular activities, and repair and maintenance are associated with quality education, 10 or more than 10 percent of the total school budget should be allocated and spent for each of these headings.

Curriculum and Curricular Materials

EFA-NPA Nepal 2001-2015 recommended that the national curriculum, single textbook for each subject and curricular materials produced by CDC be made available in each school. In this regard, all the stakeholders stated that each school has a national curriculum and all the students should get the textbooks on time. Though the curricular materials include TGs, workbooks, supplementary reading materials, curriculum elaboration manual, the HTs and the teachers stressed the need of TGs to facilitate the teaching for ensuring the quality of education.

Survey data showed that all the sample schools had a curriculum and all the students received the textbooks. But in some cases, the textbooks were not made available on time. All the sample schools except two received TGs. Moreover, some sample schools were found to have been using workbooks whereas some other schools using reference books as well.

The above-mentioned facts reveal that a curriculum, textbooks, reference books, TGs and workbooks were found to have been used in sample schools. Though reference books and workbooks help to improve the quality of education, they are not as essential as curriculum, textbooks and TGs. This may be the reason that most of the stakeholders did not suggest to include reference books and workbooks while developing the norms and standards for school monitoring. Hence, a curriculum, textbooks and TGs need to be considered for developing the norms and standards of quality education for school monitoring.

Process-related Norm and Standards

Norms and standards related to process include teaching-learning process, school management, teacher evaluation, and monitoring and supervision. The data related to these areas of norms and standards related to process are analyzed and interpreted under their respective headings.

Teaching-learning Process

The description of preparation of annual teaching plan by individual teachers, teacher's time on time, teaching technique, continuous assessment of students, and classroom supervision by HT and SS/RP is presented separately.

Annual Teaching Plan

As mentioned in EFA-NPA Nepal 2001-2015, each teacher requires to prepare an appropriate annual teaching plan of each subject for facilitating teaching-learning process. This fact was realized by all the HTs and teachers of sample schools. Moreover, the district level stakeholders emphasized on the preparation of annual teaching plan. This is because one of the sample districts (Banke) prepared and published the sample annual teaching plan of some subjects. Though all the stakeholders realized the necessity of the preparation of the annual teaching plan for each subject, majority of them were not found to have prepared it. In some schools, however, the annual teaching plan for each subject was prepared and displayed in the classrooms.

Although all the HTs, teachers and DEO officials stressed the need of preparation of annual teaching plan, majority of the teachers did not prepare it. It reveals that the preparation of annual teaching plan was not made compulsory either by schools or DEO. However, preparation of annual teaching plan helps the teachers to complete the teaching of the subject within given teaching days and the HTs and RP/SS to verify the teaching of a particular content done by the teacher. Moreover, once it is prepared, it works for several years. Hence, the norms and standards of teaching-learning process should include the preparation of annual teaching plan of each subject. However, it should not be complex. It should only include teaching days, objectives, contents, methods, and materials.

Teacher's Time on Task

Teacher's time on task is confined to teacher's weekly teaching load only, but not to time on other task. Though, the teacher's time on other task is important for developing norms and standards for quality education, its calculation is not feasible in the present context. As mentioned in the Primary School Curriculum, there are 36 periods per week for grade I to III and 39 periods per week for grade IV and V. A teacher is required to teach, at least, 24 periods per week as mentioned in EA and ER.

In order to ensure quality school education, EFA-NPA Nepal 2001-2015 suggested to implement this provision of teaching load in schools. But, this provision was not found in conformity with the reality of teaching work load of teachers of all sample schools except one of Kaski. In these schools, the teaching load of teachers ranged from 28 to 36 periods per week. The average teaching load of teachers of each school ranged from 23.8 to 36 periods per week. It reveals that the teaching load of teachers in all sample schools except one was found to have been higher than that mentioned in EA and ER. The present teaching load of the teachers, as viewed by HTs and teachers, is high. According to them, the present teaching load of teachers in schools needs to be decreased. In this regard, different stakeholders presented different views. The views regarding the teaching load per week were found to have ranged from 18 to 32 periods.

Considering the teaching periods of a teacher per week as mentioned in EA and ER, the views of stakeholders on teaching load of teachers per week, and the actual teaching load of teachers in the sample schools, the number of periods per week for a teacher should range from 24 to 30. It allows the teachers to involve the activities such as planning and preparation of teaching, home-work checking, conducting continuous assessment of students, conducting co-curricular and extra-curricular activities etc.

Teaching Technique

EFA-NPA Nepal 2001-2015 suggested to improve the teaching learning process for quality education. But it does not specify what the improved teaching learning means. In this regard, all the stakeholders viewed that whole class teaching needs to be given less priority and emphasis should be given on group teaching. Some of the stakeholders further stated that such teaching technique should be used, in which students can actively be involved through individual/group tasks (group activity), role play and use of instructional materials etc. Such activity-oriented teaching technique can be used only when the class size is appropriate. For this, sitting arrangement should be appropriate that is, sitting materials should be movable based on the types of activities. It reveals that the teaching should be child-centered. Hence, while developing norms and standards of teaching-learning process, individual/group activity, play-way method, role play and sitting arrangement related to child-centered method should be taken into consideration.

Box 2

Teaching Techniques

Grade teaching was adopted in grade I and II of Shree Naveen Primary School of Bhankundebeshi VDC-6, Kaski. The students were split into different groups for different subjects based on their performance level for facilitating the teaching. In these grades, emphasis was given on group teaching. During the group teaching, bright students were used to help their peers in their weak areas. The same bright students were used for teaching when the teacher(s) was (were) on leave. Such grade teaching helped to increase students' participation, to a great extent.

Continuous Assessment of Students

In order to enhance quality of school education, EFA-NPA Nepal 2001-2015 gave emphasis on student evaluation through Continuous Assessment System. This system included five steps. First, evaluation of students should be carried out continuously through the use of various tools, which can measure knowledge, skills and attitudes. Second, the result of students' performance should be recorded by keeping individual folder. Third, the parents should be reported about the progress of their children. Fourth, reaction from the parents about their children should be collected. Fifth, tutorial/remedial classes should be conducted for weak students based on their performance. However, this system, as discussed in Section 5.7, has been discontinued. But three-fourth of the sample schools were found to have been using class work, weekly and monthly tests, terminal examinations, observation of socio-emotional behaviour for assessing the student's progress continuously. In this regard, most of stakeholders viewed that only assessing the student's performance through different devices cannot help the students' progress adequately, but the results of assessment should also be analyzed and used. For this, the individual record of each student should be maintained and their parents should be informed about their children's progress. Based on the analysis of results, remedial teaching should be conducted for needy students. Hence, all these factors should be considered while developing norms and standards under teaching-learning process. Continuous assessment of students which was practiced by a sample school of Banke is given in the following box.

Box 3

Continuous Assessment of Students

In Saraswoti Primary School, Pipari, Kohalpur VDC-8, Banke, performance of students was assessed continuously through class work, class tests, monthly tests and terminal examinations, etc. The full marks of each subject were distributed among these assessments. The mark obtained by each student in each subject was recorded and an individual folder of each student was maintained. After each terminal examination, parents were invited to the school for discussing about their children's progress. Based on the performances of the students, weak students were identified and remedial teaching was conducted for them.

Classroom Supervision by HT

As mentioned in EFA-NPA Nepal 2001-2015, HTs should supervise the classroom teaching of teachers in *regular interval*. Furthermore, the supervision of HT should be *effective*. But the term *effective supervision* and *regular interval* are not well defined and hence they are not measurable. It is because the term regular interval did not indicate the frequency of supervision to be conducted in a week/month/year. Similarly, the term effective supervision did not specify any process and criteria.

The views of HTs and teachers regarding the frequency of supervision by HT were found different. The lowest frequency of classroom supervision of a teacher by HT, as stated by some HTs and teachers, should be twice a year whereas the highest frequency should be 10 times in a year. Survey data also showed that the frequency of classroom supervision of a teacher by the HTs was found to have ranged from 2 to

10 times in a year. Moreover, HTs used to provide feedback to the teachers individually right after the classroom supervision for improving teaching. In some schools, group interactions among the teachers and HTs were found to have been conducted after the observation of their classes. No matter whether the feedback is provided in group or individually, all the teachers realized the necessity of feedback from the HT after class observation for improving teaching.

Box 4

Class Supervision by HT

The HT of Shree Binayak Bal Primary School, Khawa, Kavre observed the classroom teaching of the teacher regularly. During the observation, attention was given to whether the teaching was activity-based or not, teaching materials were used or not, the teachers gave priority to student's participation or not, and on the whole, the training skills acquired from the training conducted by Rato Banglow were transferred to classroom or not. At the end of school hour, interaction with all the teachers including the teacher(s) whose class was observed was held. During the interaction, feedback was given to the teachers.

The above-mentioned discussion showed that the class supervision by HT is essential to ensure quality of education. The frequency of such supervision of a teacher should be at least once in two months. This frequency is justifiable on the ground that the HTs themselves have to take their classes as per daily routine and hence they would not have adequate time for supervising the classroom teaching of all teachers more than once in two months. In order to make the classroom supervision effective, feedback should be given to the teacher right after the observation of their teaching.

School Supervision by RP/SS

One of the functions of RP/SS is to supervise the schools assigned to them once in a month as per EA and ER. Moreover, they are due to observe the classroom teaching of teachers and provide feedback to them. The necessity of school supervision by RP/SS was also mentioned in EFA NPA Nepal 2001-2015. Besides, the document states that RP/SS is required to supervise the classroom teaching of teachers and organize post-supervision workshop. This provision was also supported by all the schools and district level stakeholders as all of them felt the necessity of classroom supervision. Moreover, the HTs and teachers expected feedback from the RP/SS after the observation of their classroom teaching. But the teachers of most of the schools, as shown in survey data, did not get feedback from RP/SS because they have not visited one-third of sample schools for last 10 months. Moreover, RPs/SSs were found to have visited once or two times in majority of the schools for the last 10 months.

The class supervision by RP/SS, indeed, is essential for improving the teaching performance of the teachers. However, while considering the present practice of assigning number of schools to RP/SS and their regular duties such as conducting training/workshop, establishing EMIS etc., they can not supervise as many classes as HTs do. Hence, they should supervise the classroom teaching of each teacher of every school once in three months.

School Management

School management includes School Improvement Plan (SIP), preparation of calendar of operation, total teaching days in an academic year, average attendance of teachers, staff meeting, effective SMC, effective PTA and teacher evaluation. So, the bases for developing norms and standards in these areas under school management are dealt under the succeeding headings.

Preparation of SIP

As per the provision of preparation of SIP made by the GON, each school has to prepare a SIP. All the sample schools except institutional schools were found to have prepared it. However, no uniformity was found in the format of SIP prepared by sample schools. Similarly, since the preparation of SIP helps to improve the quality of school education, all the stakeholders realized the necessity of SIP. Hence, while developing norms and standards for school monitoring, the preparation of SIP should be considered. The SIP should be prepared as per the format given by the GON to maintain the uniformity of SIP prepared by different schools.

Calendar of Operation

Each school, as mentioned in Inspectorate Directory 2062, must prepare a calendar of operation in order to ensure the quality school education. As per this requirement, the calendar of operation was found to have been prepared in all the sample schools. The common aspects included in the calendar of operation were schedule of enrollment of students, examination, and co-curricular and extra-curricular activities. Besides, schedule of meeting of SMC and PTA, and community gathering was also included in the calendar of operation of community schools. Similarly, these aspects were also included in the calendar of operation prepared by sample institutional schools of Banke and Ilam. In addition to these aspects, schedule for educational tour and annual functions like Saraswoti puja and school anniversary were also included in the calendar. All these aspects, as viewed by HTs and teachers of all the sample schools, should be included in the calendar of operation. Besides these aspects, some stakeholders suggested that some other aspects such as schedule of staff meeting, public holidays, festival holidays, vacation, total teaching days need to be included in the calendar.

Each school must have calendar of operation because of five main reasons. First, the necessity of calendar of operation was mentioned in the Inspectorate Directory 2062. Second, all the stakeholders realized its necessity. Third, each sample school had it. Fourth, the preparation of calendar of operation helps to run the school smoothly. Fifth, it can be used for monitoring the school activities. Though the Inspectorate Directory-2062 mentioned the necessity of calendar of operation for each school, the aspects to be included in the calendar were not given. Hence, all the aspects mentioned above need to be included in the calendar of operation.

Average Attendance of Teachers

One of the factors, which determines the quality of school education, is regularity of teachers. Hence, in order to find out the regularity of teachers in sample schools, average attendance of teachers of each school was collected. As shown by survey data, minimum average attendance of teachers i.e. 182 days was found in a school of Ilam whereas maximum average attendance of teachers i.e. 236 days was found in a school of Banke. In most of the sample schools, the average attendance of teachers

was found 200 days or above. The average attendance of teachers, as viewed by majority of the stakeholders, should be 200 days or above. Considering the facility of teachers staying on leave, actual average attendance of the teachers, views of stakeholders and 220 teachings days per year as mentioned in earlier sub-section, the average attendance of teachers should be, at least, 200 days.

Teaching Days

One of the determinants of quality education is the number of teaching days. In this regard, the views of HTs and teachers were found different. The number of teaching days that they stated ranged from 180 to 250 days. However, the teaching days as viewed by majority of stakeholders, were around 200 days. Similarly, the actual teaching days in sample schools ranged from 172 to 234 days. In two-third of the sample schools, the number of teaching days was found less than 200 days. These number of teaching days was less than that mentioned in EA and ER and EFA-NPA Nepal 2001-2015. The main reason for less number of actual teaching days in sample schools compared to that mentioned in the documents mentioned above was the political instability in the country. However, 250 teaching days suggested by few stakeholders is also impracticable. While considering long vacation, festivals, public holidays, Saturdays, 220 teaching days including examination days as mentioned in above documents were justifiable.

Teacher's Meeting

Three points regarding the teacher's meetings such as conducting meeting once in a month, discussing on meaningful agenda, and carrying out due process were mentioned in EFA-NPA Nepal 2001-2015. In this regard, all the stakeholders realized the necessity of conducting teacher's meetings for improving the teaching-learning process. Its frequency should be, as suggested by some stakeholders, once in two months, which was the lowest one. But some of the stakeholders viewed that the frequency of teachers meeting should be once in a week, which was the highest of all. But in most of the sample schools, teacher's meeting was found to have held once in a month. Specifically, informal teachers meeting was held every day. Interaction held in such meeting is given in the following box.

Box 5

Teachers' Meeting

Informal teachers' meeting was held for 15 minutes every day after the end of school tour in Shree Binayak Bal Primary School, Khawa, Kavre. In this informal meeting, interaction was held on problems and solutions of daily teaching, feedback of class observation by HT, regularity of students improvement of teaching-learning process, planning for teaching etc.

Teacher's meetings, indeed, should be organized for holding discussion on improving classroom teaching, conducting examinations, preparing calendar of operation, preparing SIP, improving annual teaching plans prepared by the teachers, conducting extra-curricular activities, etc. While considering the frequency of

teacher's meetings suggested by HTs and teachers, and mentioned in EFA-NPA Nepal 2001-2015, teachers meeting needs to be held, at least, once a month.

Effectiveness of SMC

Though there are several bases of assessing the effectiveness of SMC, only two bases such as frequency of meetings and school monitoring are considered. Hence, for assessing its effectiveness, data related to frequency of meetings and school monitoring are presented below separately.

Frequency of SMC meeting: Each school, as mentioned in EA and ER needs to hold SMC meeting 6 times in a year. However, this frequency of SMC meeting, as stated by most of the stakeholders, was not adequate. According to them, the SMC meeting needs to be held, at least, once in each month. Similarly, in most of the sample schools, SMC meeting was found to have been held once in a month. Since the role of SMC in the development of school is crucial, the more number of meetings help to improve the development of the school. Hence, SMC meeting should be held, at least, once in each month.

Monitoring: One of the major tasks of SMC, as stated in EA and ER, is to monitor the school regularly. However, the frequency of monitoring by SMC is not mentioned in it. In this regard, in most of the schools except institutional schools, monitoring by SMC was carried out once in a month. This frequency of monitoring was similar with the views presented by most of the stakeholders. However, the monitoring in some schools was done regularly by SMC chair and members. The monitoring practice done in a school is given in the following box.

Box 6

School Monitoring by SMC Chair

In Sagarmatha Primary School, Rajhena-2, Banke, the SMC chair visited the school twice a day for monitoring purpose: in the beginning of the school day and at the end of the school day. During his visit, he performed the following major tasks:

- Observation of external environment of the school,
- Regularity and punctuality of teachers and students,
- Interaction with HT and teachers about the problem of the school, and
- Solving the problems of the school, if any from the part of SMC.

This practice helped the teachers to be regular and punctual which increased the class occurrences.

Considering the role of SMC in the development of school, the actual monitoring of schools by SMCs and the opinions of stakeholders in this regard, SMC should be made responsible for monitoring the school, at least, once in a month.

Effectiveness of PTA

As mentioned in EFA-NPA Nepal 2001-2015, meetings of PTA should be held frequently and there should be effective interaction between teachers and parents.

However, the number of PTA meetings to be held in a month/year has not been mentioned in this document. In this regard, the PTA meeting, as stated by majority of the stakeholders, should be held once in two months. Similarly, some of the stakeholders were of the view that PTA meetings should be held once in three months or once in six months. In reality, PTA meetings were not held separately in most of the cases and PTA chairperson was invited in SMC meetings. In few cases, separate PTA meetings were found to have been conducted but the number of meetings was very low. Since one of the functions of PTA is to help improve quality of education, the PTA should meet in a regular interval

Provision of Teacher Evaluation

The evaluation of teachers should be done by HTs as per EA and ER whereas HTs along with students, peers and parents, as mentioned in EFA-NPA Nepal 2001-2015 should be made responsible for such evaluation. Moreover, in these documents the criteria for teacher evaluation were also given.

The practice of teacher evaluation was found only in some sample schools. In one of these schools, a practice of teacher evaluation was found remarkable which is given in the following box.

Box 7

Practice of Teacher Evaluation

In Siddheswori Primary School, Barbote VDC-5, Ilam, a committee for evaluating the performance of the teachers was formed, which consisted of HT, SMC chair and PTA chair. This committee developed the criteria of selecting the best teacher each year. The criteria included regularity, punctuality, feeling of cooperation, creativity, preparation and use of instructional materials and observance of rules and regulations of school, and pass percentage in his/her subject. Based on these criteria, this committee selected and declared one of the teachers as the best teachers of the year. In an annual school function, a certificate of appreciation was provided to him/her. This practice was carried on every year.

Though most of the sample schools did not have the provision of formal evaluation of teachers, all the HTs and teachers realized the need of conducting teacher evaluation. They further stated that the practice of teacher evaluation helps to increase the regularity and punctuality of teachers, to improve the teaching performance, to encourage the teachers to be actively involved in school activities etc. Hence, the teacher evaluation should be considered while developing norms and standards for school monitoring.

Output-related Norms and Standards

As mentioned in Chapter IV, one of the main aspects of quality education is output of school education. Such output is, generally, assessed based on retention rate, success rate, achievement level of students, and cycle completion rate. Hence, in order to develop bases for developing norms and standards in these areas, the

related data collected from the sample schools are analyzed and interpreted under their respective headings.

Retention Rate

As per EA and ER, retention rate can be considered as one of the indicators of quality education. In this document, the marking scheme is given for grouping the schools in three classes: A-class, B-class and C-class. According to this marking scheme, 20 out of 100 full marks are allocated to output of school education. Out of these marks, 10 percent is separated for retention rate of the schools of urban areas and 15 percent for rural areas. As per this marking scheme, 33 percent marks is given to those schools with 90 to 94 percent retention rate of the students, 66 percent marks to those schools with 95 to 99 percent retention rate and 100 percent marks to those schools with 100 percent retention rate.

The views of stakeholders regarding the retention rate were found different. Most of the stakeholders' views regarding the retention rate were found to have been ranged from 90 to 100 percent. However, their views were similar to the figures mentioned above. Similarly, as revealed by survey data, the retention rate of all the sample schools except 3 was found more than 90 percent.

The above-mentioned discussions reveal that the average retention rate of a primary school should be, at least, 90 percent. Hence, retention rate should be given due consideration while developing norms and standards for output of school education.

Success Rate

EA and ER did not consider the success rate while classifying the schools. However, EFA-NPA Nepal 2001-2015 stated that the success rate/promotion rate of the students should be 100 percent for quality education. But this target is difficult to accomplish, as viewed by most of the stakeholders. The views of these stakeholders regarding the success rate were found different.

The minimum success rate for quality education, as viewed by the stakeholders, was found to be 75 percent and the highest was 98 percent. However, the number of stakeholders who viewed the success rate to be 90 and more than 90 percent was found more than those who viewed less than 90. Similarly, there are a few stakeholders who were in favour of 100 percent success rate for quality education.

Box 8

Success Rate in Sirjana Community Secondary School, Kaski

The success rate of students from grade I to V in Shree Sirjana Community Secondary School was 100 percent in 2063 B.S. The main reasons behind high success rate were the provision of ECD centre/pre-primary grades, regularity of both students and teachers, use of activity-based teaching and instructional materials, regular monitoring SMC, PTA and HT etc.

The survey data showed that the success rate was found varied from one grade to another grade of a single school and from one school to another school. The success rate was found to have ranged from 64 percent in grade II of a school of Kaski to 100 percent in different grades of several schools of all sample districts. Similarly, the

average success rate of students was found to have ranged from 71 percent of a school of Kavre district to 100 percent in some schools of Kavre and Kaski districts. The analysis of data of success rate of grade V as compared to that of other grades could be meaningful as district wide examination was held for grade V. So, while considering the success rate for grade V of all the sample schools, it was found more than 90 percent in all schools except one.

Considering the data on success rate of students of all the sample schools, which were considered as successful in their own districts, and the opinions of HTs and teachers in this regard, the success rate should be, at least, 90 percent for quality education. Hence, the success rate should be considered while developing norms and standards of quality education.

Achievement Level of Students

One of the aspects of output of school education is the achievement level of students, which is also considered as one of the indicators of quality education. The same thing was mentioned in the report of school standard and accountability (Wagle, 2006). In this report, it was mentioned that minimum level of performance in each subject should be established as one of the indicators of quality education. As mentioned in EA and ER, while grouping the schools in different classes, the students who would be able to secure 60 percent or more than 60 percent of total marks are considered. In this regard, the marks are given to the school based on the ratio of number of students who secure 60 percent or more than 60 percent of total full marks and the total number of students in the schools.

Regarding the average achievement level of students, the views of stakeholders were found different. The range of achievement level of students, as they stated, was found from 60 to 80 percent. The number of stakeholders who stated that the achievement level of the students should be 60 percent was found more than those who stated above 60 percent. But the achievement level of students in majority of the sample schools was less than 60 percent.

Considering the above-mentioned discussion, the achievement level of students for quality education should be, at least, 60 percent because of three main reasons. First, the EA and ER stated that the achievement level should be 60 percent. Second, all the stakeholders viewed that the achievement level of students for quality education must reach 60 or more than 60 percent. Third, though the achievement level of sample schools was less than 60 percent, it should be, at least, 60 percent as it is the main indicator of quality education. Hence, this level of achievement level should be considered while developing norms and standards related to output.

Cycle Completion Rate

As mentioned in EA and ER, marks were allocated to cycle completion rate for grouping the schools in different classes i.e. A, B, and C classes. Full marks are given to those schools, which have 100 percent cycle completion rate. However, it is too difficult to reach 100 percent cycle completion rate because the cycle completion rate of sample schools was found to have ranged from 29 to 92 percent and national norms was 35.2 percent only. However, the cycle completion rate of sample schools remained below 65 percent. Most of the stakeholders viewed that the cycle completion rate should be around 85 percent. This view seemed to be highly ambiguous if the national norm and data on cycle completion rate was considered.

Hence, the cycle completion rate should be 60 percent while developing norms and standard related to output.

Development of Norms and Standards for School Monitoring

One of the objectives of this study was to develop measurable and implementable norms and standards for school monitoring for assessing and enhancing quality of education. The norms and standards for school monitoring were developed on the basis of *bases* identified in Section 6.1. *Here after, the norms and standards for school monitoring are referred to as monitoring instrument.* This monitoring instrument comprised three components; Input-related norms and standards, process-related norms and standards, and output-related norms and standards. With a view to assess the status of school in relation to quality education, to categorize the school into different classes, to enhance quality of school education by improving each component, to provide bases for the comparison of schools, this monitoring instrument was made quantifiable. For this purpose, the instrument consisted of two types of items: check list and rating scales. For the sake of convenience and simplicity, each component of monitoring instrument was allocated 100 marks and hence this instrument carried, on the whole, 300 marks. The description of norms and standards under each component is presented below.

Input-related Norms and Standards

The marks i.e. 100 allocated to this component were distributed among five sub-components: 40 marks to teachers and HTs, 30 marks to physical facilities; 13 marks to instructional and play materials; 8 marks to budget; and 9 marks to curriculum and curricular materials. For the sake of simplicity, clarity and usability, these marks in each aspect under each sub-component were given in a tabular form.

Teachers and HTs-related Norms and Standards

The marks i.e. 40 allocated to this component were distributed among six aspects: 3 marks to student-teacher ratio, 7 marks to number of teachers, 10 marks to qualification of teachers, 10 marks to basic training, 5 marks to refresher training, 5 marks to criteria for HTs. The description of norms and standards established under each of these aspects are presented in Table 1, which is given in Appendix-C.

Physical Facilities-related Norms and Standards

Altogether 10 aspects were included in this sub-components. Thirty marks allocated to this component were distributed among those 10 aspects. The marks allocated to the area of land, number of classrooms, classroom space, office room, light, ventilation, classroom environment, sitting arrangement, drinking water and toilets were 3, 3, 3, 3, 2, 2, 5, 4, 2 and 3 respectively. The description of norms and standards under each of these aspects is shown in Table 2, which is given in Appendix-C.

Instructional and Play Materials

This sub-component has two aspects: instructional materials and play materials. Each of these aspects carried 9 and 4 marks respectively. The norms and standards under these aspects are given in Table 3, which is given in Appendix-C.

Expenditure of School

Though the amount allocated in budget was expended under several headings, the norms and standards were developed for only four headings such as salary, instructional and play materials, co-curricular and extra-curricular activities and repair and maintenance. The main reason for including expenditure in these aspects is that recurring expenses affect the quality of education. The percentage of expenditure under each of these headings should be calculated based on the total amount spent under the four headings. Eight marks allocated to this aspect is given in Table 4 in Appendix-C.

Curriculum and Curricular Materials

This sub-component, which carried 9 marks, included three aspects such as curriculum, textbooks and TGs. The norms and standards set for each of these aspects are presented in Table 5 in Appendix-C.

Process-related Norms and Standards

The marks allocated to this component was distributed in two major sub-components: 50 marks for teaching-learning process and 50 marks for school management.

Teaching-Learning Process

Of fifty marks allocated to this sub-component, 5, 8, 20, 11, 3, 3 marks were allocated to annual teaching plan, teacher's time on task, teaching technique, continuous assessment of students, class supervision by HT, and class supervision by RP/SS respectively. The details about norms and standards of each aspect under this sub-component are given in Table 6 in Appendix-C.

School Management

This sub-component, which carried 50 marks, had eight different aspects. The norms and standards developed for each aspect are given in Table 7 in Appendix-C. Under these sub-components, 5, 10, 5, 10, 4, 2, 2 and 2 marks were distributed to calendar of operation, number of teaching days, teachers meetings, SMC meeting, PTA meetings, average attendance of teachers, SIP and teacher evaluation respectively.

Output-related Norms and Standards

This component included four main sub-components: retention rate, success rate, achievement level and cycle completion rate. Twenty five marks were allocated to each of these sub-components. The norms and standards established for each of them are presented in Table 8 in Appendix-C.

CHAPTER VII

Ways of Achieving Norms and Standards

The norms and standards for school monitoring for assessing and enhancing quality school education have already been developed and presented in Chapter VI. One of the objectives of this study was to find out the ways of achieving these norms and standards of quality education. Hence, opinions regarding the ways collected from different groups of stakeholders were analyzed and interpreted under the following headings.

Adequate Number of Teachers

The GON should provide adequate number of teachers to each school on the basis of number of grades/sections and STR. There are two ways to meet the salary of these teachers. First, the GON should increase the budget for salary component. Second, EA and ER has made a provision of Village Education Fund in which 3 percent of total profit of each institutional school is deposited. This provision needs to be implemented and the percentage of amount to be deposited by institutional schools should be increased. This fund should be used for the salary of teachers. Until the GON provides adequate number of teachers, the SMCs need to manage the required number of teachers. For this, the SMC should manage the fund for salary of teachers from VDC/municipality, NGO, forest user's groups, saving and credit groups, etc.

Qualification of Teachers and Head Teachers

The minimum qualification for the teachers and HTs of primary schools was fixed as PCL/HSE in education or PCL in any subject and 10 months basic training as norms and standards. However, priority needs to be given to the teachers with Bachelor's Degree for HTs. In order to appoint the teachers and HTs with required qualification, necessary amendment should be made in the present EA and ER. In case of working teachers and HTs who have the lower qualification than the required one should be given opportunity to upgrade their qualification. Moreover, the provision of study leave and in-service programme should be made for teachers who want to upgrade their qualification.

Training for Teachers and Head Teachers

The 10-month training for the working teachers should be given as soon as possible. However, this training is not required for the teachers with PCL/HSE in education. In order to achieve the norms and standards related to training, only the candidates who had training should be appointed. In case of refresher training, it should be conducted at the schools in the beginning of academic session without affecting the regular classes. However, the management training for HTs should be organized from time to time.

Acquisition of Land

While analyzing the opinions of school and district level stakeholders regarding the acquisition of land, three ways were identified. There is public land in each VDC and Municipality. The school can acquire such land from VDC or municipality. Similarly, the land for school can be acquired from individual donors. The next way of acquiring the land is purchasing the land at the lowest cost. Three opinions regarding the collection of fund for purchasing land was found. First, the fund needs

to be collected from the community people and guardians. Second, the financial support from VDC/municipality and District Development Committee (DDC) should be acquired. Third, financial support should be collected from the GON. Regarding the acquisition of land by sample schools, the land was received by most of the sample schools through VDC/municipality and individual donors. Similarly, in some cases, the pieces of land were purchased by the schools themselves for which the fund was collected from the community people, guardians and VDC. But the GON did not provide fund to purchase land. Hence, for acquiring the land as per norms and standards, the three ways mentioned above should be followed.

Number of Classrooms and Office Room

In each school, adequate number of classrooms needs to be managed on the basis of grades/sections and STR. Moreover, a separate room is required for office. Four different ways were identified to meet the norms and standards regarding the number of classrooms and office room. First, cash and/or labour donation need to be received from parents and community people for constructing the rooms. Second, financial support should be acquired from VDC/municipality. The third way is acquisition of financial support from INGOs and NGOs. Fourth, the GON should provide the financial support to school for constructing the classrooms and office room. Apart from these, while constructing new classrooms, priority should be given to add storey instead of making a new block/building, which decreases the cost of construction of a building.

Space, Light and Ventilation in Classrooms

While constructing the new classrooms, they should be designed considering the norms related to classroom space per student, light and ventilation. These designs need to be approved by DEO. Later, the concerned officials of DEO should monitor the site whether classrooms are being constructed as per approved design or not.

Classroom Environment and Sitting Arrangement

With a view to make the classroom environment attractive, the walls of the rooms should be plastered and painted, the floor of rooms should be plastered and learning materials should be displayed in the classrooms. In this regard, short-term training for HTs, teachers and SMC members needs to be conducted to bring the positive attitude among them toward classroom environment. Then, exposure visit of successful schools need to be organized from which the stakeholders can get first hand experiences on classroom environment. A workshop for the teachers needs to be organized to develop adequate number of instructional materials to display them in the classrooms. In case of wall painting, SMC should be made responsible. Similarly, the teachers need to acquire the technical support from RP to display the materials in an attractive way. As mentioned above except the organization of workshops they need to be followed for achieving the norms and standards related to sitting arrangements.

Drinking Water and Toilets

Each school must have adequate drinking water for which either tap or tubewell needs to be installed. Similarly, separate toilets for teachers and students, and separate toilets for boys and girls need to be constructed. The ways for managing drinking water facility and constructing toilets are similar to those mentioned in the

earlier section. Besides, materials can be acquired from District Drinking Water Office. In case of making drinking water safe, medicine should be used.

Play Materials

In order to achieve the norms and standards related to play materials, the schools must have essential indoor and outdoor play materials. Though outdoor play materials are expensive, once they are purchased they can be used for several years. Hence, the schools themselves should manage both indoor and outdoor materials gradually.

Budget

Orientation programme for HTs, teachers, SMC chairpersons and members must be organized to acquaint them with the preparation of school budget according to norms and standards given in Appendix-C. Similarly, if the schools do not have adequate budget for the headings such as salary, instructional and play materials, co-curricular and extra-curricular activities and repair and maintenance, the required amount for the budget can be collected from different sources such as community, VDC/municipality and forest users' groups and further instructional and play materials can be acquired from NGOs/INGOs etc.

Curriculum and Curricular Materials

Each school must have a primary school curriculum and TGs published by CDC, which should be acquired from DEO. In case of distributing textbooks to all students in time, the schools must purchase textbooks with the grant money provided by the GON. If the budget for the textbooks is not released on time, the school's own source should be used for purchasing the textbooks, which can be reimbursed when the budget is released by the GON. The next way of distributing the textbooks to the students is the use of old books.

Student-centered Teaching Techniques

In order to encourage the teachers to use the student-centered teaching techniques, in-depth practical-oriented knowledge and skills should be given to the teachers during the training. Similarly, HTs and RPs should monitor the classroom teaching of teachers in order to ensure whether the teachers are using the student-centered teaching technique or not. Moreover, those schools which use activity-based teaching techniques need to be identified and then the teacher exchange programme should be organized with them. Lastly, in order to use the student-centered teaching technique, the class size should be as per the norms and standards mentioned in previous chapter.

Continuous Assessment of Students

In order to make the schools use continuous assessment of students, total marks should be distributed to classwork, weekly test, unit test and monthly test. The marks obtained in these areas should be considered in the terminal examination. The marks obtained in terminal examinations, again, should be considered in the final examination. An individual folder of students should be maintained to record a student's progress. Parents are invited to school after every terminal examination for informing about their children's progress and the progress cards of children need to be distributed to parents. These progress cards along with their comments need to

be collected from parents. Based on the performance of the students, the remedial teaching should be conducted for needy ones.

Monitoring and Supervision

Though EA and ER made a provision of monitoring of school by SMCs and classroom supervision by HTs, it has not been effectively implemented. Hence, the improvement in quality of education has not been observed. In order to improve the quality of school education by meeting the norms and standards related to monitoring and supervision, the SMCs and RPs should monitor the schools, but the classroom supervision should be done by HTs and RPs.

In order to increase the frequency of monitoring by SMCs, the chairpersons and members should be made aware of their responsibility of monitoring schools. For this, the short-term training needs to be organized for them. In order to make the monitoring effective and regular, a schedule of monitoring of school for each member of SMC should be prepared. The monitoring record should be maintained in a separate record book. Similarly, the schools themselves, should demand the monitoring and supervision from RPs. For this, the frequency of monitoring and supervision by RPs should be included in the calendar of operation of school. The monitoring and supervision of schools by RPs should be monitored by DEO.

In order to achieve the norms and standards related to classroom supervision by HTs, it would be better if the qualification of HTs is one level higher than the minimum qualification of teachers for the purpose of conducting post supervision conference of the teachers after the class observation. Hence, priority should be given to the teachers with Bachelor's Degree while appointing HTs. Besides, training of classroom supervision needs to be organized for HTs to enable them to perform the activities related to supervision effectively. Similarly, to let them perform the activities related to supervision, their teaching workload should be reduced. The record of classroom observation needs to be maintained and its copy should be sent to their respective RPs.

SIP, Calendar of Operation and Annual Teaching Plan

The ways of achieving norms and standards related to SIP, calendar of operation and annual teaching plan are presented under their respective headings.

SIP

All the stakeholders realized the necessity of training for HTs, teachers, SMC and PTA chairpersons and further added that the members for preparing SIP should be organized at RC level. The school should prepare the SIP as per the format given by the GON. During the preparation phase, as stated by some stakeholders, DEO officials should monitor whether the school prepared SIP as per the given format or not. The SIP should be disseminated in the guardian's gathering and its copy should be sent to DEO.

Though all the stakeholders realized the necessity of training for HTs, teachers, chairpersons and members of SMCs and PTAs, indeed such training should be provided to HTs, selected teachers who will be involved in SIP preparation, and chairpersons of SMCs and PTAs. Since it is difficult to prepare SIP in large group, a committee should be formed for preparing SIP. The committee should consist of HT, a representative of teachers, representatives of SMC and PTA. While preparing the

sip, the RP should monitor whether it is prepared as per the format of the GON or not. Lastly, the SIP should be approved by the respective RP.

Calendar of Operation

Most of the HTs and teachers expected the training for the development of calendar of operation. Prior to the development of calendar of operation, a staff meeting, as they stated, needs to be organized to identify the aspects to be included in the calendar of operation and to assign the responsibility of preparing it. In this regard, two views appeared. First, having discussed in the staff meeting, the HT himself or herself needs to prepare the SIP. Second, the calendar of operation should be prepared jointly by HT and teachers. The calendar of operation, as stated by the HTs and teachers, should be presented in the guardian's gathering. One copy of the calendar of operation should be sent to RC/DEO.

The above-mentioned opinion revealed that one-day practical training at the preparation of the calendar of operation needs to be organized teachers and SMC members at RC level by RP. Prior to the development of calendar, a committee consisting of HT, a teacher and a representative of SMC should be formed. This committee needs to organize a meeting to discuss in detail on the aspects to be included in the calendar of operation. Based on the suggestions of the meeting, the committee should prepare a detailed calendar of operation which should be approved by the teacher's meeting and SMC meeting. Lastly, its copy should be sent to their respective RC.

Annual Teaching Plan

With a view to maintain a uniformity in annual teaching plan, as stated by most of the HTs and teachers, a teacher's meeting should be held in which the format and components to be included in the annual teaching plan are identified. They further stated that, in the beginning of an academic session, some days should be given to the teachers to prepare an annual teaching plan of the subjects they teach. The HT needs to help each teacher to prepare an annual teaching plan. A copy of annual teaching plan of each subject should be given to HT.

While considering the views mentioned above, a teacher's meeting is required to develop a common format and components to be included in it. Since each teacher needs to prepare an annual teaching plan, a few days should be separated in the calendar of operation for preparing it. Similarly, instead of submitting the annual teaching plan to HT, they should be displayed in the respective classrooms which facilitate the teachers to teach and the HT to monitor.

Teaching Days and Average Attendance of Teachers

Two hundred twenty teaching days and 200 average attendance of teachers were established as norms and standards under school management. Since the number of teaching days i.e. 220 days has already been mentioned in EA & ER, the number of days of average attendance of teachers should also be mentioned in the EA & ER. As a result, the HT gives attention to the regulations to grant long leave to teachers. Similarly, the total attendance of teachers should be made one of the criteria of teacher's evaluation. Moreover, a record of year-wise attendance of each teacher should be sent to their respective RC.

In order to ensure the required number of teaching days, the RP should review the calendar of operation sent by each school. If the teaching days in the calendar of

operation of some schools are found less than the norms and standards, it should be sent back to school for revision. Similarly, the RP needs to monitor the schools whether the schools are running the classes as per the calendar of operation or not. In order to create the feeling of competition among schools, the teaching days and an average attendance of teachers of all schools should be displayed at DEO.

Teacher's Meeting, SMC Meeting and PTA Meeting

Three ways were identified for achieving the norms and standards related to the frequency of teacher's meeting, SMC meeting and PTA meeting. First, the teacher's meeting and PTA meeting should be monitored by SMC. Similarly, SMC meeting should be monitored by RP. Second, a copy of minute of teacher's meeting and PTA meeting should be sent to SMC. Likewise a copy of minute of SMC meeting should be sent to RC. Third, the decisions of SMC and PTA meetings should be presented in the guardian's gathering.

Evaluation Criteria

The performance Appraisal Form given in TSCR needs to be made more simple and short. A provision should be made to evaluate each teacher using this form by HT. The obtained marks calculated from the form should be sent to respective RC, which should be used for rewarding and promoting the teachers.

Improving Retention Rate

The norms and standards related to retention rate for quality school education should be 90 percent or more. In order to achieve this norm, different groups of stakeholders presented different views. One of the ways of improving the retention rate, as stated by most of the stakeholders, is to make the environment of the school student- friendly. For this purpose, the classroom environment should be attractive, teaching-learning process should be activity-based. There should be good relationship between teachers and students, and punishing students should be discouraged. Specifically, homework and examinations should not be a psychological barrier for the students to be regular in the schools. All these facts make the learning of the students joyful which helps to improve the retention rate of the students.

Similarly, the retention rate can be increased through raising the awareness of the parents. For this purpose, some stakeholders suggested that SMC should form mother's groups in different halmlets of school service area. Each of these mother' groups identifies the irregular students and encourages the parents of these students to send them to school regularly through home visits. For this activity, SMC itself should be active. Likewise, SMC should organize the community gathering for raising the awareness regarding the regularity of students.

The retention rate, as viewed by some stakeholders, is determined by the school environment and school activities. The school which has increased the retention rate through improving the school environment and conducting the school activities effectively, should be rewarded by DEO.

From the above-mentioned discussion it can be concluded that the school itself should be aware of increasing the retention rate for which SMC and PTA should be made active. Then, SMC is required to organize the community gathering and mobilize the mother's group for increasing the retention rate. Similarly, the

classroom environment and activities need to be made child-friendly for improving the retention rate. In addition to these, on part of DEO s/he should make a provision of rewarding schools with high retentions rate.

Increasing Success Rate and Achievement Level

The norms and standards of 90 percent success rate and 60 percent average achievement level were established in previous chapter. The success rate of most of the sample schools was in conformity with this norm whereas the average achievement level was far from the established norm. In order to achieve these norms, all the stakeholders emphasized on maximum class occurrences for which the monitoring of school by SMC is required. Similarly, some stakeholders viewed that the training skills of teachers should be transferred to make the teaching effective for which the classroom supervision is a must by HT and/or RP/SS. Moreover, all the stakeholders were in favour of staffing each school with adequate number of qualified and trained teachers. Some of these stakeholders emphasized on rewarding those schools which had the high success rate and achievement level. All these facts reveal that in order to increase the success rate and achievement level of students, each school must have the adequate number of qualified and trained teachers also there should be the regular monitoring of SMC for increasing the regular class occurrences. HT needs to supervise the classroom teaching of teachers from time to time, and there should be a provision of rewarding the school which achieves the norms and standards of success and achievement level.

Cycle Completion Rate

The cycle completion rate of each school depends upon the retention rate and success rate. Hence, there should be the high retention rate and success rate to increase the cycle completion rate. It is because the ways of increasing retention rate and success rate are similar to those of increasing the cycle completion rate. Besides, the school itself should be made aware of the cycle completion rate for which the orientation programme should be organized for HTs, teachers, chairpersons and members of SMCs and PTAs.

CHAPTER VIII

Findings of the Study

The findings derived from the analysis and interpretation of data made in previous chapters are enumerated below:

Perception of Quality School Education

- *Policy-level Stakeholder conceived* high enrolment, high retention, high success rate, high achievement level and high cycle competition rate as quality education. Similarly, education, which enables the students to acquire knowledge and skills based on their needs and interest and to apply them in their daily life; and which brings change in their behaviour, is perceived as quality education. Moreover, the learning and behavioural change of the student should satisfy the parents for quality education.
- Quality education, as perceived by *district level stakeholders* is better output in terms of high accomplishment of learning outcomes mentioned in the curriculum or high achievement level, high acquisition of life skills; positive impact of school education on the life of student; and better performance of the primary school graduates at lower secondary grades.
- Quality school education denotes high retention of students, high success rate, high accomplishment of learning outcomes mentioned in the curriculum or high achievement level, and high acquisition of life skills, as perceived by *HTs and teachers*. Moreover, education, which enables the students to acquire knowledge and skills based on their needs and interests and to apply them in their daily life, and which draws out their innate potentialities and makes the students more disciplined and moral, is considered as quality education.
- As perceived by *SMC/PTA chairpersons and members, and parents*, quality education includes content related to daily life, social values and norms. It refers to effective teaching-learning process and high output (high achievement level and high success rate and change in socio-emotional behavior). Moreover, life-oriented and practical oriented education, and education which makes the students disciplined and moral are also perceived as quality education.

Basic Requirements for Quality School Education

- The basic requirements for quality education identified by the stakeholders of policy and practice levels, were adequate number of qualified and quality teachers, teacher training, physical facilities, instructional materials, monitoring and supervision, teaching-learning process, continuous assessment of students, effective leadership of HTs, active SMC and PTA, textbooks and TGs.

Norms and Standards of Quality School Education and Ways of Achieving them

- The number of teachers was found inadequate either in terms of grades/sections in some sample schools or in terms of STR in other schools. In order to use activity-based teaching and continuous assessment of students for improving the quality of education, the number of teachers needs to be increased in terms of grades/sections and STR. The STR needs to be made 30:1

in Himal, 35:1 in Mountain and 40:1 in Terai. For this, the stakeholders realized the necessity of providing adequate number of teachers on the part of the GON. The teachers need to possess qualities like positive attitude towards teaching, feeling of responsibility, pedagogical knowledge, ability to care children, competent in subject matters etc. Until the government provides the adequate number of teachers, SMCs themselves need to manage adequate number of teachers.

- Three-fourth of working teachers had PCL and the rest of them who had only SLC felt difficulty in teaching upper grades of primary schools. Hence, most of the stakeholders realized the necessity of increasing the minimum qualification for primary school teachers from SLC to PCL/HSE in education or PCL in any subject with 10-month teacher training. Moreover, they expected refresher training of 3 to 7 days in the beginning of academic session.
- Two-third of HTs and teachers of sample schools were in favour of appointing HT with Bachelor's Degree as they need to play a leading role and to conduct in-house teacher training in schools. Majority of HTs of successful schools who had 16 or more than 16 years of teaching experiences had also received one-month management training.
- Majority of sample schools had adequate land i.e. 2035 sq. m. (4 ropanis). Similarly, all the sample schools had adequate number of classrooms as per grades/sections, drinking water facility and toilets. Though drinking water facility was available in all the sample schools, it was not found safe in three-fourth of them. Similarly, all the sample schools had toilets, but such facility was inadequate in one-fourth of them.
- Land could be acquired from VDC/municipality, individual donors and by purchasing at lowest cost. In order to manage additional classrooms, drinking water facility and toilets, financial support could be received from parents, community people, VDC/municipality, NGOs/INGOs and labour donation from community. Moreover, District Drinking Water Office might be one of the sources for receiving materials support for managing drinking water facility.
- Since the space in the classrooms of grades I and II of all the sample schools was adequate, and the classrooms had carpet or carpet and low-level tables, the teachers in these schools were using activity-based teaching. In case of grades III, IV and V, though the classroom space was adequate, the furniture was not found movable. In order to fulfill the norms and standards related to classroom space (i.e. 1 sq. m. per student), and adequate light and ventilation in the classroom, the stakeholders realized the necessity of appropriate design of the classrooms prior to their construction.
- In order to make the classroom attractive and child-friendly, HTs and teachers realized the necessity of painted walls and display of materials in the classroom, which were also found in majority of the sample schools. Such classroom environment could be managed through short-term training and exposure visits to successful schools for HTs, teachers and SMC chairpersons. Similarly, adequate instructional materials could be prepared through workshops.

- Outdoor and indoor play materials were identified as basic play materials for physical development of the students. All these materials except some installed play materials were available in all the sample schools. Once these materials are managed, they can be used for several years. Hence, the stakeholders realized that the schools themselves need to manage these materials gradually.
- All the sample schools had a curriculum and textbooks but some of them could not distribute the textbooks to the students in the first month of academic session. Similarly, all the sample schools except two had received TGs published by CDC. Acquiring a curriculum and TGs from DEO is the responsibility of schools themselves. Regarding the distribution of textbooks to students on time, the schools could use their own financial source for purchasing the textbooks or they could distribute old books if the budget is not released on time.
- Teacher's meetings and SMC meetings were held for acquiring support from community; for improving teaching-learning process; for preparing SIP, calendar of operation, annual teaching plan; and for interacting about the examinations. In these meetings, the PTA chairperson was also invited. For the accomplishment of purposes of these meetings, the frequency of teachers, and SMC's and PTA's meetings were fixed 10 times respectively for a year and the of PT's meetings was fixed 5 a year frequency as normal standards. In order to ensure whether the required number of meetings was held or not, SMC is made responsible to monitor the teacher's meetings and PTA meetings. Similarly, it is the responsibility of RP to monitor the meetings of SMC.
- All the sample schools were found to have prepared the calendar of operation. In order to prepare it, a committee consisting of HT, SMC member and a representative of teachers is required. This committee prepares a calendar of operation and its copy needs to be sent to RC.
- Though 220 teaching days were mentioned in EA and ER as norms and standards, there were only 200 teaching days in majority of the sample schools. The main reason for low teaching days was the political disturbances in the country and hence, 220 teaching days mentioned in EA and ER seemed to have been justifiable as norms and standards. Considering the facility of teachers in taking leaves, the average attendance of teachers was fixed 200 days as norms and standards. In order to ensure the required number of teaching days, RP needs to give attention in this matter. The provision of displaying the total attendance of teachers in an academic session of each school at DEO and of making the total attendance of a teacher in an academic session as one of the criteria of teacher evaluation help to increase average attendance of the teachers
- The sample schools were found successful because of monitoring by SMCs. Hence, the frequency of monitoring of schools by SMC was fixed 10 times in a year as norms and standards. In order to make monitoring of schools by SMCs effective, three steps i.e. training the SMC chairperson and members, preparing the schedule of school monitoring and keeping the record of such monitoring in the school, were identified.
- Classroom supervision was carried out by HTs of sample schools which helped to improve the classroom teaching of teachers. But the RPs could not supervise the classroom teaching of teachers. However, since the class supervision would

help the classroom performance of teachers, the frequency of such supervision by HTs and by RPs was fixed 10 times and 5 times in a year respectively. This provision of classroom supervision can be materialized only when the HTs are trained in classroom supervision; the workload of HTs is decreased; the schedule of class supervision is mentioned in the calendar of operation; and its record is to be maintained. Similarly, demand of RP's services by the schools themselves make the RPs to visit their respective schools and to supervise the teaching of teachers of these schools.

- HTs and teachers preferred student-centred teaching in order to make the teaching child-friendly and to involve the students in class activities. This could be done through teacher exchange programme and effective class supervision by HTs and RPs.
- Continuous assessment of students through class work, unit tests, weekly tests, monthly tests and terminal examinations was done in three-fourth of the sample schools. Such assessment system would help to increase retention rate and achievement level of the students. Moreover, maintaining the folders of individual students, reporting the progress of students to parents and giving feedback to the students made the continuous assessment of teachers more meaningful. The teachers and HTs were in favour of distributing the marks to class tests, unit tests, weekly tests, monthly tests and terminal examinations, which make them conduct continuous assessment of students.
- Though the preparation of annual teaching plan would help teachers to complete the teaching of content within stipulated time and to verify the content taught with the time mentioned in the plan, majority of the teachers were not found to have prepared annual teaching plan. The provision of including the schedule for the preparation of annual teaching plans in the calendar of operation and displaying them in the respective classrooms stimulate the teachers to prepare them.
- Though all the schools were found to have prepared SIP, uniformity was not found in the format of SIPs. In order to make the schools prepare SIPs as per the format given by the GON, four steps, such as forming a committee for preparing it, organizing the training for HTs, teachers and SMC/PTA chairpersons at RC level, monitoring by RP during its preparation and finally sending it to DEO, were identified.
- Though the provision of teacher evaluation would help to increase regularity and punctuality of teachers, improve their teaching performance, and encourage them to actively involve in school activities, teacher evaluation was done only in some of the sample schools. Evaluation of teachers will be done by HTs only when the evaluation form is made simple and short, the marks obtained by the teachers are used as one of the criteria for promotion and the marks of each teacher of the schools are sent to RC.
- The minimum expenditure on salary was found 40 percent in a sample school whereas the maximum expenditure in the same heading was 91 percent in the next school. However, the expenses on salary in majority of schools lied between 60 to 80 percent. These facts were found to have been similar with the opinions presented by different stakeholders. Regarding the allocation of budgets in different headings except salary, emphasis was also given on

instructional and play materials, co-curricular and extra-curricular activities, and repair and maintenance.

- Ninety percent retention rate was fixed as norms and standards under output. This norm can be achieved in all the schools through making SMC and PTA active, forming mother's groups, rewarding the schools with high retention rate and making the classrooms child-friendly.
- Considering the views of stakeholders, survey data of sample schools and norms mentioned in EA and ER, norms and standards was fixed 90 percent for success rate, 60 percent for achievement level and 60 percent for cycle completions rate. These norms and standards can be achieved through maximum class occurrences, making the provision of adequate number of qualified and trained teachers, monitoring of school by SMCs and RPs, supervision of classes by HTs and RPs and rewarding the schools with high success rate, high achievement level and high cycle completion rate. Besides, it is essential to make the HTs and teachers aware of cycle completion rate.

CHAPTER IX

Conclusions and Recommendations

Based on the analysis and interpretation of data made in previous chapters and findings, the following conclusions were derived. On the basis of conclusions, recommendations were furnished. The conclusions and recommendations are presented here separately.

Conclusions

- The perceptions of policy level stakeholders and practice level stakeholders such as district, school, and community level stakeholders on quality education were, more or less, similar in terms of aspects to be covered by quality education. These aspects were retention rate, success rate, achievement level, cycle completion rate and content useful for daily life which brings changes in the behaviour of students. In addition, the district level stakeholders perceived quality education in terms of impact of primary education on the performance of the students at lower secondary grades.
- The present minimum qualification for primary school teachers is inadequate for making teaching-learning process effective. Though one of the factors which determines the quality of education is adequate number of teachers, the GON has not paid due attention to providing adequate number of teacher positions to the primary schools.
- The present provision of minimum qualification for HT of a primary school is not adequate. Moreover, the minimum qualification of a HT needs to be one level higher than that of teachers. In order to play a leading role and manage schools, the basic teacher training is not adequate for HTs.
- Achieving the norms and standards related to every aspect of physical facilities is one of the pre-requisites for ensuring quality school education. Adequate land is required for conducting out-door play activities; adequate classroom space facilitates to conduct activity-oriented teaching; adequate drinking water and toilets are related to health and sanitation of the students; and decorated classroom environments attract the students to attend the school regularly. The school can manage physical facilities by tapping supports from different sources in addition to the GON support.
- The availability of curriculum and TGs, and distribution of textbooks to students in sample schools on time implied that the school and district level stakeholders gave due attention in this regard. Furthermore, they realized that the curriculum, TGs and textbooks were essential for ensuring quality education. Considering the availability of instructional and play materials in sample schools, the schools themselves could manage the basic instructional and play materials.
- For ensuring quality education, more emphasis was given on teacher's meetings and SMC meetings than on PTA meetings. The monitoring of these meetings was also weak.

- Preparation of SIP and calendar of operation by all the sample community schools implied that the stakeholders of these schools realized the necessity of SIP and calendar of operation for quality education.
- Though there was a direct relationship between teaching days and average attendance of teachers, the DEO did not give due attention to these aspects.
- SMC chairpersons and members were identified as key agents for school monitoring. Similarly, HTs were identified as key professional leaders for class supervision, which would help the teachers to carry out activity-oriented/child-centred teaching. Similarly, continuous assessment of students was emphasized in order to increase the output of school.
- Though the provision of teacher evaluation could help to make teachers regular and punctual and to improve their teaching performance, adequate attention has not been given in this aspect.
- For improving the retention rate, success rate, achievement level and cycle completion rate, the role of SMC, PTA, mother's groups, and parents could be crucial along with the role of HTs and teachers.

Recommendations

Concepts of Quality School Education

- MOES should develop an acceptable concept of quality school education through workshops using the findings of this study.

Qualification and Training of Teachers and HTs

- The GON should provide adequate number of teacher positions on the basis of grades/sections and STR. For this, DOE should acquire the actual number of teachers and students in each grade of each school through DEO. The minimum qualification for primary school teachers should be increased from SLC to PCL in education/HSE in education or PCL/HSE in any subject and ten-month basic teacher training. The minimum qualification required for a primary school teacher mentioned in the present EA and ER should be revised. Regarding the working teachers with SLC, they should be given opportunity to upgrade their qualification by providing the facility of study leave.
- The refresher training for all the teachers should be conducted at school in the beginning of every academic year. The duration and contents of such refresher training should be determined on the basis of the needs of the teachers. Subject-wise refresher training should be conducted at RC by RP and local experts whereas in-house training should be conducted at school by HT.
- Qualification and experience should be made major criteria for appointing the HT along with other criteria. The candidate for HT must have 10-year teaching experience. Though the minimum qualification for the HT should be PCL/HSE in education, priority should be given to the candidate with Bachelor's Degree for which additional marks should be given. Moreover, one-month management training should be given to the HTs at PTTCs.

Physical Facilities

- A primary school needs at least, 2035 sq.m. i.e. 4 ropanis of land which can be acquired from VDC/municipality, individual donors and purchasing it at the lowest cost. In order to manage adequate number of rooms, toilets and drinking water in the schools, cash and labour donation can be received from community people and financial support from VDC/municipality, INGO and GON. Prior to the construction of classroom, their design should be prepared by the concerned officials on the basis of required space, light and ventilation as per the norms and standards. All these activities are to be carried out by SMC.

Classroom Environment

- In order to make classroom environment attractive and teaching-learning child-friendly, NCED should develop a separate short-term training package for HTs and teachers, and RCs and NGOs should implement it. Similarly, to make the sitting arrangement comfortable, carpet and low-level tables need to be managed for grades I and II. Movable benches and desks should be managed from grade III to V by the schools themselves. For this, exposure visits to successful schools should be organized by RPs. Similarly, a workshop for teachers should be organized to prepare adequate number of instructional materials in each school in the beginning of academic session for which RP should provide the guidelines.

School Plan

- Each school must have SIP, calendar of operation and annual teaching plan. In order to develop these plans, HTs, teachers, chairpersons and members of SMCs and PTAs should be trained by DEO officials at RCs.

Curriculum and Curricular Materials

- Curriculum and TGs for each school should be made available by DEO. The textbooks should be made available to each student in the first month of academic session. If the budget for textbook is not released to school on time, the school's own source should be used for this purpose. Similarly, the basic indoor and outdoor play materials need to be made available by each school.

Meetings

- Emphasis should be given to hold PTA meetings, teacher's meetings and SMC meetings for which schedules should be prepared. Monitoring mechanism needs to be developed to make these meetings effective and to ensure the required number of meetings.
- Under this mechanism, PTA meetings and teacher's meetings should be monitored by SMC, and SMC meetings by RP.

Monitoring

- The responsibility of monitoring schools should be given to SMC chairpersons and members.
- SMC should prepare a monitoring schedule in the beginning of academic session. As per the schedule, SMC chairperson and members should monitor

the school on rotation. Having monitored the school, the chairperson or member should write the monitoring note in a separate register book.

Class Supervision by HT

- The provision of class supervision by HT, as mentioned in EA and ER should be implemented in each school. In order to enable HTs for class supervision, short-term training should be organized by RPs at RCs. For class supervision, the teaching load of HTs must be reduced. After the class observation, interaction with the concerned teachers should be held for providing feedback to them. In order to ensure class supervision by HT, the report of class supervision with frequency of supervision, name of the teacher, subjects, major suggestions should be sent to RC and SMC quarterly.

Continuous Assessment of Students

- In order to make teachers use continuous assessment of students, the total marks needs to be distributed to classwork, class tests, monthly tests along with terminal examination. For this, the separate guidelines for teachers should be prepared and these guidelines should reach the hands of the teachers.

Expenditure

- In order to ensure quality education, the expenditure on salary of teachers needs to be 70 or less than 70 percent of the total. Expenditure similarly, the expenditure of each in instructional and play materials, co-curricular and extra-curricular activities and repair and maintenance should be 10 or more than 10 percent. These percentages should be calculated only from four headings such as salary, instructional and play materials; co-curricular and extra-curricular activities; and repair and maintenance. Hence, while preparing a budget, a separate calculation of these four headings should be carried out in each school.

Finalization of Norms and Standards of Quality Education

- MOES should finalize the norms and standards of quality school education developed by this study through workshops and pre-testing.

Evaluation of Teachers

- The evaluation of teachers should be done by HT in each year. For this, the Performance Appraised Form should be made short, simple and objective. The marks obtained by each teacher in every year should be made one of the criteria for promotion. The norms related to average attendance of teachers of a school should be mentioned in EA and ER, which increase the teaching days. The total attendance of teachers should be made one of the criteria for promotion. The attendance record of teachers should be sent to DEO annually.

Further Study

- An in-depth study should be conducted to assess the quality of school education by using the norms and standards under each requirement of quality education developed by this study.

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APPENDIX A

Norms and Standards under Each Requirement for Quality Education

Physical Facilities

Components of Basic Requirements	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee on School Education, 2001	Education Act 1971 (Eight amendment) and Education Regulations, 2002	EFA NPA Nepal 2001-2015
Building				Meet adequate safety standard
School site	Edge of village Attractive either by natural surrounding or by planting flowers and shrubs or by both Pleasing surrounding			
Land	3 Acres		20 Rapanis and above	
Number of rooms	Five for students Separate room for teachers Separate room for office		As per grades and number of students	
Learning corner				Necessity of Reading and Math corner
Class Size	30 students		25 students in grade I 30 students in grade II to V	25 to 30 students in grade I 30 to 35 students in grade II to V
Classroom Space	9 square feet per pupil (300 to 400 square feet per room)		0.75 square meter for each student	
Height			9 feet	
Doors and Window	- Large	- Easily opened and closed	- Easily opened and closed	

Components for Basic Requirements	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee on School Education, 2001	Education Act 1971 (Eight amendment) and Education Regulations, 2002	EFA NPA Nepal 2001-2015
Light	Adequate natural light	Adequate for each student to read and write	Adequate for each student to read and write	
Ventilation			Circulation of air	
Chalkboard			Adequately clear while writing and reading	
Furniture	Individual desk of 10 to 14 inches height Mats for lower grades Individual chair and table Chair and desk for teacher in each class room Furniture for storage Bulletin board			Good and adequate size in each class Basic furniture for comfortable sitting
Surface of the floor			Not lower than ground level	
Sitting arrangement	Non-segregated (both boys and girls)			
Compound	Permanent compound wall		Compound wall with main gate along with shutters	
Playground	Necessary Adequate space for football, volley ball, cricket		Necessity	60 m x 40 m per 200 students
Play equipment	Swing, slide, Jungle-Gyms, Teeter-rotters Foot ball, volley ball, and cricket		Game materials necessary	
Garden				Necessary
Toilet			One toilet per 200 students	One toilet for 50 students

			Separate toilets for boys and girls Separate toilets for male and female teachers	(for both boys and girls)
Drinking Water			-Filtered -Adequate	Safe drinking water
Laboratory	Benches, table, cabinet, tools and materials		Usable with sitting provision	Necessary
Library	Adequate space Dust proof shelves Magazine, newspaper and bulletins Tables and chairs Availability of space for 30 students at a time		Separate room More than 500 textbooks and reference books	Several sets of textbooks and reference books in all subjects
Repair and Maintenance				Regular
Instructional materials			Necessary	Appropriate for all school subjects and co-curricular activities Basic instructional materials Two computers
First aid			Necessary	
Support facilities				Necessary for boys, girls and children with special needs
Drainage	Well-managed			
Repair and Maintenance				Regular

Teacher Management

Components of Basic Requirements	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee on School Education, 2001	Education Act 1971 (Eight amendment) and Education Regulations 2002	EFA NPA Nepal 2001-2015
Qualification		100% teachers with minimum qualification		12 years of schooling
Teachers position		Availability of number of teachers as per positions	Availability of number of teachers as per positions At least 3 teachers	
Teachers with higher qualification		Provision for additional scores for teachers with higher qualification	Provision for additional scores for teachers with higher qualification	
Number of trained teachers		More than 50% fully trained teachers	School evaluation in terms of number of trained teachers	100%
Provision of female teachers		Provision of score for each female teacher	50%	
Training				One year training (10 months)
Refresher training			In concerned subject at school level	Every year
Nature of training				Generalist
In-house training				Regular
Teaching license			Necessary Teaching license as pre-service condition for new teachers	Necessary
Promotion		Through rigorous testing		Three levels of primary teachers Once in every five years Opportunity to promote to lower secondary and secondary school
Teaching				All primary school subject

Teacher's accountability				Necessary
Teacher's time on task			At least 24 period per week	Reflected in school regulations
Teacher's participation				Academic planning Lesson panning Annual planning Operational planning
Evaluation of teachers			By HTs	By students By peers By parents Evaluation record to be kept by HTs

School Management

Component of Basic Requirements	Nepal National Education Commission, 1956	Report of High Level Working Committee on School Education, 2001	Education Act 1971 (Eight amendment) and Education Regulations	EFA NPA Nepal 2001-2015
Appointment of HT			Based on following criteria: (i) 10 years experience, (ii) trained, (iii) minimum qualification, (iv) ability to establish relationship to community and (v) leadership	Trained and qualified based on criteria approved by stakeholders
HT training				One month training for conducting in-house training
Extension of service of HT				Based on performance of HT by SMC
Attendance of teachers				Full and complete in an academic year
Teaching days	200 days (4 to 6 hours per day)		220 days	220 days
Number of student in the school		500 above No. of girls- above 50%	500 above No. of girls- above 45%	NER 96% by 2009
Attendance of students	100%			Full and complete in an academic year
STR		1:40	50:1 in Tarai and Valley 45:1 in Mountain 40:1 in Himal	
Classroom supervision by HT				Effective Regular interval
School supervision			Once in a month by SS	Localized supervision through School Supervisors (SS) and Resource Persons (RP) Training for S and RPs Organizing the post

				supervision workshop
School-based monitoring and supervision				Necessary
Orientation training				Orientation training to DDC, VDC/ Municipality and SMC
Staff meeting				At close interval (Once in a month) Meaningful agenda Due process to be followed
SMC			Formation of SMC as per EA & ER 6 meetings per year Contribution of SMC as per EA & ER	Adequate authority in financial and personal administration
PTA				Frequent meeting Effective interaction between parents and teachers
Expenditure		70% of the total school budget for salary of teachers More than 10% of the school budget for instructional materials More than 10% school budget for repair and maintenance	70% of the total school budget for salary of teachers More than 10% of the school budget for instructional materials More than 10% school budget for repair and maintenance	
Efficiency of school		100% cycle completion rate 0% repetition rate 0% dropout rate Achievement rate - 60%	100% cycle completion rate 0% repetition rate 0% dropout rate Achievement rate - 60%	100% promotion rate 0% dropout rate
Transfer of school management to community				Necessary

Teaching Learning System

Components of Basic Requirements	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee for Education, 2001	Education Act 1971 (Eight Amendment and Education Regulations)	EFA NPA Nepal 2001-2015
Teaching Learning System				Appropriate daily schedule
				Adequate daily schedule (sufficient time to teach all contents) Appropriate annual schedule Improved teaching learning
Medium of instruction	Nepali only exclusively from grade III, if possible from grade I			
Instructional materials			Necessary	Appropriate for all school subjects Basic instructional materials Two computers

Curriculum Transaction and Instructional System

Components of Basic Requirement	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee for Education, 2001	Education act 1971 (Eight Amendment and Education regulations)	EFA NPA 2001-2015
Goals and objective in curriculum			National goals, level wise goals and subjectwise learning outcomes	
Organization of curriculum	Integrated emphasis on projects and activities			Decentralized curriculum and textbooks with life skills contents
Time allotment in curriculum	Flexible			
Use of curriculum				Use of the same national curriculum of CDC Use of single textbook for each subject
Process of curriculum development				Continuous
Improving Curriculum transaction			Actual need-based	Relevancy of annual teaching learning programme with curricular objectives Enhancement of teacher's competency through training Orientation to teachers for developing instructional programme Participation of teachers in workshops related to curriculum transaction Availability of curricular materials produced by CDC Dissemination of curricular materials Inclusion of contents on local context (20%) in curriculum

Student Achievement Assessment System

Components for Basic Requirement	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee on Education, 2001	Education Act 1971 (Eight Amendment and Education Regulations)	EFA NPA Nepal 2001-2015
Student achievement assessment system				Student evaluation through CAS
				Use of various tools of evaluation appropriate for knowledge, skills and attitudes
				Introduction to curriculum- based tools for grades 3 to 5
				Student assessment based on learning outcomes
				Record keeping of students' performance
				Reporting parents about their children's performance
				Receiving reaction from the parents about their children
				Provision of tutoring system for week students based on their performance
				Provision of special programme for gifted students
				Teachers to be trained in providing appropriate homework on the basis of students' capability and need
				Provision of appropriate homework management system
Improvement and expansion of student assessment				Expansion of CAS Identification of items as mentioned in primary curriculum of all subjects and grades Preparation of special training package for district level personnel, HTs and teachers

Teacher's Evaluation Criteria and Evaluation of School

Components of Basic Requirement	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee on Education, 2001	Education Act 1971 (Eight Amendment and Education Regulations)	EFA NPA Nepal 2001-2015
Teachers' Evaluation Criteria				Number and quality of teacher-generated and collected materials
				Pass percentage
				Mean score of students
				Average attendance
				Time on task
				Ways of managing classroom for effective teaching
				Participation of staff meetings regarding students'; assessment
Evaluation of School			Classification of schools in four grades/categories	Provision of school ranking mechanism
				Establishment of monitoring and evaluation system at all levels
Research				Conducting research at district level

National Policy Support

Components of Basic Requirement	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee on Education, 2001	Education Act 1971 (Eight Amendment and Education Regulations)	EFA NPA Nepal 2001-2015
Policy				Quality of primary education needs to be reflected in development plan
				Compulsory primary education should be approved by national parliament
Political commitment				Priority on primary education needs to be reflected in the election manifestos of political parties
Legal provision				Devolution of decision making authority to management of school and school managers

Output and Outcome Indicators

Components of Basic Requirement	Nepal National Education Planning Commission, 1956	Report of High Level Working Committee on School Education, 2001	Education Act 1971 (Eight Amendment and Education Regulations)	EFA NPA Nepal 2001-2015
National norm of student achievement				Fixation of norms at around A level for all primary school students
				Use of criterion-referenced assessment
				Helping students to achieve the highest level of ability
Positive impact on social and community life				Helping improve the condition of family life and community through health, habit, sanitation and cleanliness by primary school graduates
				Effectiveness of community level organization because of participation of school graduates
Higher rate of achievement at secondary level				100% enrollment of primary school graduates to lower secondary school grades
				50% of school age population of community successfully completed the secondary education

APPENDIX-B:

Norms and Standards mentioned in the Tenth Plan, HLWCSE and BPE Master Plan, 1998-2002

- Norms and standards mentioned in Tenth Plan
- The minimum qualification for primary school teachers should be higher secondary education.
- The teacher training should be made mandatory.
- The teachers must have teaching license.
- The Tenth Plan made a target of reaching NER to 90%.
- The management of school should be transferred to community.

Norms and Standards mentioned in School Standard and Accountability Public School Report, Kathmandu: ADB

- Curriculum standard
 - Pro-active to foster the student's full human potentials for enabling them to be competent in the global competitive context of the 21st century
 - Contextually relevant contents
 - Pedagogy of questioning
 - Development of courses around questions and competency ascertaining evaluation
 - Development of cognitive domain of learners
 - Teachers as depositors of knowledge and students as depositories of knowledge
- Student performance standard
- Leadership standard
 - Visioning the future
 - Setting commensurate values to translate the vision
 - Building team spirit among the stakeholders
 - Introducing innovation to optimize achievement
 - Expanding knowledge based through establishing access to the sources of knowledge
 - Exploring opportunities and initiating meaningful negotiation to exploit them
 - Mobilizing resources
 - Building and expanding networks for greater advantage
- Management standard
 - Shift from its old position to a new one where pro-active stance
- Teacher standard

- Shift of teacher’s role from a passive disseminator of contents from the text to an active pedagogue
- Teachers with in-depth understanding and knowledge about the educational environment
- Fully aware of their roles and functions
- Having professional commitment and job motivation
- Promoters of professional potentials and builders of self competency
- Designers of innovation
- Practitioners of learning as to be student centred
- Policy standard
 - Laying down the development philosophy of the country which serves as the basis to set up policy standard (against the traditional elitist pattern coupled with vested political interest)
- Financial standard
 - Guided by policy standard visualized in the changed context
- Learning resource standard
 - Fostering insights and creative ideas so as to use variety of resources around us to make learning motivational and relevant
 - Emphasis not only to read the word but also to read the world
 - Addition of the dimension of modern technology in the delivery of learning inputs
- Performance standard
 - Establishing minimum level of performance in each subject (using student’s achievement in examinations as the measuring rod of school standard is wrong)
 - Use of criterion reference measurement instead of the on- going age-old norm reference one.
- Norms and standards mentioned in BPE Master 1998-2002
 - 90% NER
 - 75% cycle completion rate
 - 100% pass rate for grades I to III
 - 90% pass rate for grades IV and V
 - 75% average score on national assessment at grade III
 - 40% increase in average score on national assessment at grade V
 - 90% daily attendance of students
 - 80% average daily attendance of teachers
 - 100% teachers attending a minimum of ten-day training.

APPENDIX-C

Development of Norms and Standards for School Monitoring

Table 1

Distribution of Marks under Different Aspects of Teachers and HTs

Teacher-student Ratio (Marks: 3)		Norm	Obtained Marks
40:1 in Terai 35:1 in Mountain 30:1 in Himal		3	
60:1in Terai 52:1in Mountain 45:1in Himal		2	
More than 60:1 in Terai More than 52:1 in Mountain More than 45:1 in Himal		1	
Number of Teachers (Marks: 7)		Norm	Obtained Marks
Adequate number of teachers as per grade/section and STR		7	
One teacher inadequate as per grade/section and STR		5	
Qualification of Teachers (Marks: 10)		Norm	Obtained Marks
All teachers with PCL/HSE in education/PCL in any subject and 10-month training or above		10	
Marks to be given on the basis of percentage of teachers mentioned above out of total number of teachers		0-9.99	
Basic Training (Marks : 10)		Norm	Obtained Marks
All the teachers with 10-month training/PCL/HSE in education		10	
Marks to be given on the basis of percentage of teachers mentioned above out of the total number of teachers		0-9.99	
Refresher Training (Marks: 5)		Norm	Obtained Marks
All the teachers with refresher training (latest refresher training conducted in the school or in district)		5	
Marks to be given on the basis of percentage of teachers with refresher training out of total teachers		0-4.99	
Criteria for Head Teachers (Marks: 5)		Norms	Marks obtained
Experience 10 or more than 10 years of teaching experience	Yes	2	
	No	0	
Qualification PCL/HSE in education/PCL in any subject and 10-month training	Yes	2	
	No	0	
Training Management training	Yes	1	
	No	0	

Table 2

Distribution of Marks under Different Aspects of Physical Facilities

Availability of Land in Sq. M. (Marks: 3)		Norms	Obtained Marks
2035 sq.m. for 200 students		3	
From 1-25% less than required land i.e. 2035 sq.m. for 200 students		2	
From 26 to 50% less than required land		1	
From 51 and more than 51% and less than required land		0	
Availability of Classrooms (Marks: 3)		Norms	Obtained Marks
Adequate number of classrooms for all grades/sections		3	
1 room less than required number classrooms		2	
2 or more rooms less than required number of classrooms		1	
Classroom space per student (Marks: 3)		Norms	Obtained Marks
1 sq.m. per student		3	
0.75 to 0.99 sq. m. per student		2	
Below 0.75 sq. m. per student		1	
Office room (Marks: 3)		Norms	Obtained Marks
Chair and table	Adequate	1	
	Inadequate	0	
Shelves	Yes	1	
	No	0	
Display of materials such as calendar of operation, weekly routine, name list of SMC, PTA and teachers, charts of enrollment, success rate and achievement level etc.	8 or more than 8 items	1	
	5-7 items	0.75	
	2-4 items	0.5	
	Below 2	0	

Adequate Light (Marks: 2)		Norms	Obtained Marks
Adequate light in all rooms		2	
Light inadequate in one room		1.5	
Light inadequate in 2 or more than 2 rooms		1	
Ventilation (Marks: 2)		Norms	Obtained Marks
Adequate ventilation in all rooms		2	
Ventilation inadequate in one room		1.5	
Ventilation inadequate in 2 or more than 2 rooms		1	
Classroom Environment (Marks: 5)		Norms	Obtained Marks
Plastered and painted wall	Yes	1	
	No	0	
Plastered floor	Yes	1	
	No	0	
Wall painting in grade I and II	Yes	1	
	No	0	

Display of materials	Yes	1	
	No	0	
Learning corners in grades I and II	Yes	1	
	No	0	
Types of Sitting Arrangement (Marks: 4)		Norms	Obtained Marks
Carpet and low level table in grade I and II		2	
Carpet in grades I and II		1.5	
Benches and desks in grades I and II		1	
Movable benches and desks from grades III to V		2	
Non-movable benches and desks from grade III to V		1	
Drinking water (Marks: 2)		Norms	Obtained Marks
Availability of drinking water inside school compound	Yes	1	
	No	0	
Safe drinking water (medicated or filtered)	Yes	1	
	No	0	
Toilets (Marks: 3)		Norms	Obtained Marks
Separate toilet for teachers and students	Yes	1	
	No	0	
Separate toilets for boys and girls	Yes	1	
	No	0	
Adequate toilets (1 toilet for 50 students)	Yes	1	
	No	0	

Table 3
Distribution of Marks under Different Aspects of Instructional and Play Materials

Instructional materials (Marks: 9)	Norms	Obtained Marks
Readymade		
Availability of ready-made instructional materials in all subjects	3	
Ready-made instructional materials not available in one subject	2	
Ready-made instructional materials not available in 2 or more than 2 subjects	1	
Teacher made		
Availability of teacher-made instructional materials in all subjects	3	
Teacher-made instructional materials not available in one subject	2	
Teacher-made instructional materials not available in 2 or more than 2 subjects	1	
Local available		
Availability of locally available materials in all subjects	3	
Locally available materials not available in one subject	2	
Locally available materials not available in 2 or more than 2 subjects	1	
Play Materials (Marks: 4)	Norms	Obtained Marks
Availability of outdoor play materials		
Ten or more than 10 items	2	
6-10 items	1.5	
3-5 items	1	
1 to 2 items	0.5	
Availability of indoor play materials		
Four or more than 4 items	2	
Three items	1.5	
Two items	1	
One item	0.5	

Table 4**Distribution of Marks under Different Aspects of Expenditure in Different Headings**

Distribution of expenditure (Marks: 8)	Norms	Obtained Marks
Salary		
70 or less than 70% of total expenditure	2	
71 to 80% of total expenditure	1.5	
81% to 90% of total expenditure	1	
90 and above 90% of total expenditure*	0.5	
Instructional and play materials		
10 or more than 10 percent	2	
6 to 9 percent	1.5	
2 to 5 percent	1	
Less than 2 percent	0.5	
Co-curricular and extra-curricular activities		
10 or more than 10 percent	2	
6 to 9 percent	1.5	
2 to 5 percent	1	
Less than 2 percent	0.5	
Repair and maintenance		
10 or more than 10 percent	2	
6 to 9 percent	1.5	
2 to 5 percent	1	
Less than 2 percent	0.5	

*Note: Total expenditure include the expenditure headings of salary, instructional and play materials, co-curricular and extra-curricular activities and repair and maintenance.

Table 5

Distribution of Mark under Different Aspects of Curriculum Materials

Curriculum and Curricular Materials (Marks: 9)	Norms	Obtained Marks
Availability of curricular in the school Yes No	1 0	
Textbooks: All the students have textbooks 90 to 99% of students have textbooks Less than 90% students have textbooks	3 2 1	
Distribution of textbooks on time Available in the first month of academic session Available in the second month of academic session Available in the third month and onwards	3 2 1	
Teacher's Guide Available all the teachers' guide published by CDC Marks to be given on the basis of availability of teacher's guides	2 0-1.99	

Table 6

Distribution of Marks under Different Aspects of Process

Annual Teaching Plan (Marks: 5)	Norms	Obtained Marks
Preparation of annual teaching plan by all teachers	5	
Marks to be given on the basis of percentage of total annual teachers who prepare annual teaching plans	0-4.99	
Teachers' Time on Task (Marks: 8)	Norms	Obtained Marks
Average Work load of teachers:		
24-30 periods per week	8	
31-35 periods per week	6	
36 and above	4	
Different Teaching Technique (Marks: 20)	Norms	Obtained Marks
Child-centered teaching method (activity-based, play way method, role play)	20	
Marks to be given on the basis of percentage of teachers who use child-centered teaching method	0-19	
Continuous Assessment of Students (Marks: 11)	Norms	Obtained Marks
Use of continuous assessment of students (class work, weekly and monthly tests, unit tests, observation of socio-emotional behavior by all the teachers)	5	
Marks to be given on the basis of percentage of teachers who use continuous assessment of students	0-4.99	
Provision of maintaining individual folder	2	
Yes	0	
No		
Reporting to parents through progress report card	2	
Yes	0	
No		
Feedback given to the students to all teachers	2	
Marks to be given on the basis of percentage of teachers who give feedback to students	0-1.99	
Classroom Supervision by HT (Marks: 3)	Norms	Obtained Marks
Classroom supervision of all teachers by HT in last academic year (at least 5 classroom supervision of each teacher)	2	
Marks to be given on the basis of the percentage of teachers whose classroom teaching was supervised 5 times or more than 5 times in last	0-1.99	

academic year		Obtained Marks
Feedback given to all teachers	1	
Marks to be given on the basis of percentage of teachers to whom feedback is given	0-0.99	
Classroom Supervision by RP/SS (Marks: 3)	Norms	
Classroom supervision of all teachers by RP/SS in last academic year (at least 3 classroom supervision of each teacher)	2	
Marks to be given on the basis of the percentage of teachers whose classroom teaching was supervised 3 times or more than 3 times in last academic year	0-1.99	
Feedback given to all teachers	1	
Marks to be given on the basis of percentage of teachers to whom feedback is given	0-0.99	

Table 7
Distribution of Marks under Different Aspects of School Management

Calendar of operation (Marks: 5)	Norms	Obtained Marks
Inclusion of all aspects (Enrollment, examination, co-curricular and extra-curricular activities, SMC meeting and PTA meetings, staff meeting, community gathering, excursion, annual function, holidays, Saturdays and vacation, total teaching days) in calendar of operation	5	
Marks to be given on the basis of percentage of above-mentioned aspects included in calendar of operation	0-4.99	
Number of Teaching Days (Marks: 10)	Norms	Obtained Marks
220 days or above	10	
200-219	8	
180-199	6	
169-179	4	
140-159	2	
Below 140	0	
Teacher Meeting in Last Year (Marks: 5)	Norms	Obtained Marks
At least ten times in a year	5	
Marks to be given on the basis of percentage of meetings held	0-4.99	
SMC Meeting and Monitoring (Marks: 10)	Norms	Obtained Marks
SMC meetings at least ten times in a year	5	
Marks to be given on the basis of percentage of meeting held	0-4.99	
Monitoring of schools by SMC, at least, one times in a year	5	
Marks to be given on the basis of percentage of monitoring of schools	0-4.99	
PTA Meeting (Marks: 4)	Norms	Obtained Marks
PTA meetings, at least, 5 times in a year	4	
Marks to be given on the basis of percentage of meetings held	0-3.99	
Average Attendance of Teachers (Marks: 2)	Norms	Obtained Marks
200 or more than 200 days	2	
Marks to be on the basis of percentage of average attendance of teachers	0-1.99	
Preparation of SIP (Marks: 2)	Norms	Obtained Marks
Preparation of SIP Yes	1	
No	0	
Preparation of SIP as per the format given by the government	1	
Yes	0	
No		
Teacher Evaluation (Marks: 2)	Norms	Obtained Marks
Teacher evaluation Yes	1	
No		
Evaluation of teachers based on Performance Appraisal form prescribed by Teacher Service Commission Regulations	1	
Yes		
No		

Table 8

Distribution of Marks under Different Aspects of Output

Retention Rate (Marks: 25)	Norms	Obtained Marks
90 percent and above	25	
80 to 89 percent	20	
70 to 79 percent	15	
60 to 69 percent	10	
50 to 59 percent	5	
Below 50 percent	0	
Success Rate (Marks: 25)	Norms	Obtained Marks
90 percent and above	25	
80 to 89 percent	20	
70 to 79 percent	15	
60 to 69 percent	10	
50 to 59 percent	5	
Below 50 percent	0	
Achievement Level (Marks: 25)	Norms	Obtained Marks
60 percent and above	25	
50 to 59 percent	20	
40 to 49 percent	15	
30 to 39 percent	10	
20 to 29 percent	5	
Below 20 percent	0	
Cycle Completion Rate (Marks: 25)	Norms	Obtained Marks
60 percent and above	25	
50 to 59 percent	20	
40 to 49 percent	15	
30 to 39 percent	10	
20 to 29 percent	5	
Below 20 percent	0	

Note:

10.35 sq. m. land for 1 student

5 sq. m. of land for 1 student of the number of students in the school exceeds 20 students

2035 sm. = 4 ropani

1 anna = 31.79 sq.m.

1 katha = sq.m