

*Baseline Study on Existing Classroom
Teaching Learning Practices in Nepal*

*Report Submitted to
ASD/SSB (Supported by OS9)*

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May 2010

ACKNOWLEDGEMENT

Effective classroom teaching learning helps in improving quality of education. Quality of education is reflected in the quality of students' learning. If students' are made to rote memorize textbook content and reproduce them in the examination paper, then other essential aspects of education might be ignored. Rather than a thinking being, students are treated as empty vessels to be filled up by the teacher's knowledge. A thinking and inquiring mind should be aimed at today's education and Critical Thinking should be promoted in the classrooms.

This is baseline study of existing classroom teaching learning practices in the Nepalese schools carried out before implementation of the Critical Thinking methodologies at the school level. At present 62 people within University teachers and National Centre for Educational Development of Ministry of Education are receiving Training of Master Trainers on Critical Thinking methodologies organized by Alliance for Social Dialogue/ Social Science Baha, Kathmandu with the support from Education Support Programme, Open Society Institute, New York. These master trainers will train school teachers on Critical Thinking methodologies after completion of their training. This study intends to provide baseline information to compare classroom teaching learning practices after Critical Thinking training input in the schools.

The research team undertaking this study benefited from supports, inputs and interactions with individuals, institutions and key stakeholders. On behalf of the research team I would like to express sincere gratitude to all of them.

We are thankful to Ms. Svetlana Batrak, Senior Program Officer, OSI; Mr. Hari Sharma, Director, Alliance for Social Dialogue; and Mr. Deepak Thapa, Director, Social Science Baha for entrusting this study to us. Advice and technical support given in connection with this study by Prof. Kedar Bhakta Mathema; Prof. Dr. Prakash Man Shrestha, Dean, FOE, TU; and Dr. Saurav Dev Bhatta have been very useful to us. Research team considerably benefited from the advice, support and resources from CT International Trainers Ms. Veronica Cretu and Mr. Nicu Cretu. Ms. Sanju Koirala, Program Officer, ASD contributed in this research as a research team member as well as facilitated in smooth conduction of the study by providing prompt administrative support. We had considerable support at the field from Ms. Bijaya K. C., Mr. Bishnu Poudel and Mr. Eakraj Bhandari. Support of Mr. Anup Singh for data management was of great help in timely completion of the report. Research team expresses heartiest gratitude to all of them.

Head teachers/Principals, teachers, students, parents and School Management Committees of the visited schools; and District Education Offices of the visited districts were also of great help in the process of going ahead with this study. We sincerely thank them all for their cooperation.

More importantly we thank Goreto Nepal for logistic support for facilitating and providing required support in the task of completing the study.

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May 2010

ABBREVIATIONS

ASD	Alliance for Social Dialogue
CDC	Curriculum Development Centre
CERID	Research Centre for Educational Innovation and Development
CT	Critical Thinking
EDSC	Educational and Development Service Centre
MOE	Ministry of Education
MOES	Ministry of Education and Sports
NCED	National Centre for Educational Development
OSI	Open Society Institute
PTA	Parent Teacher Association
SMC	School Management Committee
SSB	Social Science Baha

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CHAPTER I

INTRODUCTION

This is a baseline study on the existing classroom teaching learning practices in Nepalese schools. This baseline study is conducted before Critical Thinking (CT) methodologies are introduced in the school. This chapter introduces the study, rationale for undertaking this study, objectives and methodologies used.

Background of the Study

Research studies and Education Commission reports have repeatedly indicated that classroom teaching learning in the Nepalese schools is still dominated by rote learning. Studies related to classroom practices (EDSC, 1999; CERID, 2004; CERID, 2005) have mainly found classroom delivery to be teacher dominated with an emphasis on rote memorization of the content matter. The dominant approaches are lecturing, paraphrasing, drill, reading and repeating from textbook, and memorising questions and answers. The classroom process, which is envisioned to be child centred, was found largely confined to the whole class teaching, with the effect that the weaker ones are left behind. Single language, single session, same materials (if used), same method (usually lecture or paraphrasing) were the general practices in classroom delivery. A CERID (2002) study pointed out about 88% of the teachers (out of 153 observed classes) resorted to the traditional methods of teaching. The ‘National Curriculum Framework for School Education (Pre-primary to 12) in Nepal’, which has been implemented since July 2009, points out, ‘There is more emphasis on rote learning and lecture oriented teaching. Interaction between students during classroom teaching, use of extracurricular activities and project works are almost non-existent.’ (CDC, 2005).

National education commissions have expressed concerns about ineffective classroom teaching learning practices. For example, the National Education Commission in 1992 reported, ‘the teaching learning situation in primary schools is rather depressing... Students are encouraged to learn by rote, and assessments are made on the same basis.’ The ‘Concept paper for further support on Basic and Primary Education in Nepal 2004-2009’ (MOES, 2002) pointed out a need to deemphasise rote learning and a need to develop ways to end the practice of treating students in classes as homogeneous units.

Beginning with the first national education planning commission in 1956 in Nepal, quality of education has been emphasised. Education plan documents have progressively come up with various plans for improving classroom pedagogy – child centeredness, inclusiveness, individualisation, active learning, joyful learning, continuous assessment and other such terms have been used.

The core document of Education for All (MOES, 2003) envisions a Nepalese school’s classroom by 2015 as having:

...a stimulating learning environment, designed to meet the learning need of all students, thus ensuring that each student develops to their full potential. This recognizes that children learn in different ways at different rates and will achieve different levels of attainment. It is a caring environment, in which there is mutual respect between teacher and students, and from student to student. It is a safe and happy environment, to which students look forward to coming each day.

The School Sector Reform Programme implemented from July 2009 also accords students' learning as the most important aspect and propose to 'promote independent learning by students being educated under diverse situations.... Local curriculum, content and materials will be developed.... A child's mother tongue will be employed as the medium of instruction up to grade three.... Flexible instructional arrangements will be developed and employed...' (MOES, 2008).

There have been some endeavours to translate these suggestions into classroom practices, however there has been no significant and tangible improvement in classroom teaching and learning practices. Studies have pointed out several reasons that stand in the way of improving classroom teaching learning such as crowded classrooms, lack of instructional materials, poor physical facilities, content loaded curriculum, teachers' practice of using textbooks and not consulting the curriculum and so on. These and others issues, namely, the lack of transfer of training skills and lack of motivation on the part of teacher can impact on the transfer of CT strategies as well (Please see Appendix A for brief description of Critical Thinking). Addressing effectively such problems as well is crucial for the success of CT in Nepal. CT methodologies (Crawford, Saul and Makinster, 2005) address crowded classes since there are strategies which can be used in a class of 60, 200, or any number of students. There are various factors that indicate CT to be a viable strategy to improve classroom teaching learning in Nepalese classrooms such as – easy adoption of CT strategies with all subjects in the curriculum; active and reflective ways to involve students in learning process; and modelling arrangement of the traditional classroom setting into better setting. CT also emphasize asking and discussion on higher level of questions to engage students in the thinking process. Another encouraging aspect is that CT provides concrete examples of the use of CT methodologies in the classrooms of other countries where the classroom is crowded and facilities are lacking.

Rationale of the Study

CT methodology is a comprehensive and complete package and is well tested in more than 37 countries and classrooms of similar conditions to Nepalese one as well. Therefore it can be an adaptable model in Nepal to improve classroom teaching learning to improve the current teaching learning approach.

Expert team from Open Society Institute (OSI) presented demonstration workshop on CT to educational planners, decision makers and University teachers in Nepal in December 2008 which was acclaimed by the ministry people as well as university teachers. Alliance for Social Dialogue (ASD)/Social Science Baha (SSB) signed Memorandum of Understanding with the Faculty of Education, Tribhuvan University and National Centre for Educational Development (NCED) to organize CT training to their teachers/staffs. Three phases of the five 5 days training on CT have also been completed to two groups of trainers, pre-service (teachers of Faculty of Education of Tribhuvan University and Kathmandu University) and in-service group (trainers of NCED and Non-government Origination representatives) in Nepal by ASD/SSB. Three more demonstration workshops have been conducted by the international CT trainers/experts and two more outside Kathmandu by CT Nepal trainees.

In order to adopt CT methodologies to improve classroom teaching learning in the Nepalese schools, it will be essential: 1) to provide evidences that CT methodologies improve classroom practices as well as students' learning; and 2) to demonstrate that CT methodologies are implementable in Nepalese classrooms. Therefore, it deemed

appropriate that a study on the CT project in Nepal be conducted using baseline and endline data/information. The first phase of this study is initiated with the baseline survey of the existing classroom teaching learning practices in Nepalese schools which aims at describing present situation before implementation of CT in the Nepalese schools.

Objectives of the Study

The main goal of the study (baseline and endline) is to provide empirical evidence to educational planners and other stakeholders on how adoption of CT methodologies can improve classroom teaching learning in Nepalese classrooms. The present baseline study has basically the following specific objectives:

1. to establish baseline on existing classroom practices in terms of a) classroom setting and b) instructional setting, and
2. to find out stakeholders' perception of quality of classroom teaching learning practices and their suggestions on it.

The information collected in this baseline study will later be used in conjunction along with information collected from an endline study to analyze the changes in the classroom teaching learning practices.

Methodology

This study is intended to establish baseline of the existing classroom teaching learning practices before implementation of the CT program at the school level. While planning for the baseline consideration has been taken for the follow-up study to be conducted later as well. Therefore this study has been designed as following:

- This baseline study is framed for an experimental design. The schools and teachers covered in this baseline study will be divided into control group and experimental group for the CT training and follow-up study.
- The classroom observation and interaction instruments developed for this study are based mostly on instruments used in the CT documents. The indicators used for effective classroom teaching learning in these instruments include most of the aspects for effective classroom teaching learning involving both the teacher and students. Moreover these tools will be useful to assess effectiveness of the CT strategies for the improvement of existing classroom teaching learning after its application. CT methodology describes students and teachers standard for an effective classroom teaching learning (The International Reading Association, 2000; Crawford, Saul and Makinster, 2005). As these standards are intended outcome of the CT methodologies for classroom teaching learning, these standards and indicators are adopted in this study. Necessary changes have been made while developing study tools from the rubric for teacher and student standards from these documents. These changes were made: 1) information put together were separated such as 'student responds to higher order questions from *teacher* and *peers* with relevant and informed responses' were separated into two items 'student responds to higher order questions from *teacher* with relevant and informed responses' and 'student responds to higher order questions from *peers* with relevant and informed responses', 2) Instead of rating used in the rubric either number of episodes or description of events were done as descriptors of the rating criteria were not clear to the research team. Such number would be helpful to make comparisons from baseline to endline or between the groups. 3) Though some indicators in the CT standards might not be observed in the existing classroom practices, these were

included in the study for later comparisons after teachers are trained on CT methodologies.

Study Approach

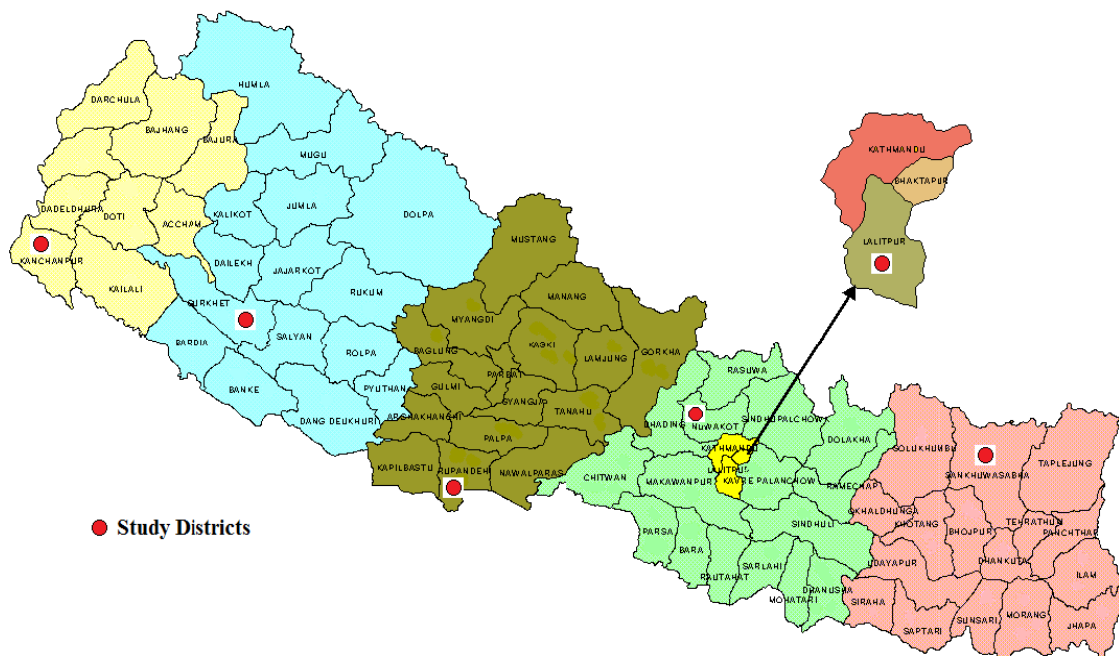
This study aimed at collecting and analyzing qualitative information regarding classroom teaching learning practices. Classroom setting, teacher activities and student activities during classroom teaching learning were major focuses for collecting information about existing classroom teaching learning practices. This was collected by observing the lesson delivered in the class. Besides supplementary information were collected through interaction – group discussion/focus group discussion and interview with school level stakeholders such as Head teacher/Principal, teacher, student, School Management Committee (SMC), Parent Teacher Association (PTA) and parent.

Sample

The sample covered in this study included 32 teachers from 16 schools in 6 districts from different parts of Nepal. The sample of this study is described in this section.

Districts: Altogether 6 districts were covered in this baseline study from different regions according to geographical and regional distributions so as to cover various school conditions. For this districts were first stratified and then selected purposefully to represent each strata. Thus Kanchanpur was included in the study from Far-Western Development and Terai region; Surkhet from Mid-Western and Hill region; Rupandehi from Western Development and Terai region; Nuwakot and Lalitpur from Central Development and Hill region; and Sankhuwashava from Eastern Development and Mountain region. Nuwakot district was included in the study later to cover more schools. Study at a school in Surkhet district could not be completed due to strike in the schools in the district and private school could not be covered in Sankhuwashava due to examination followed by vacation. The districts covered in this study are shown in the following figure:

Figure 1: Sample districts covered in the study



Schools: Schools from the sample districts were selected representing location (rural/urban) and schools type (community/public and institutional/private). It was planned to cover one community school and one institutional school located at the district headquarter and one community school located at the adjoining Village Development Committee for the study in consultation with District Education Office. Due to technical difficulty to complete field work in some of the sampled schools in Sankhuwashava and Surkhet, replacement schools were included in Nuwakot. Thus 11 schools from urban centre and 5 schools from rural areas were covered in this study. Similarly 11 schools were covered from community schools and 5 schools from institutional schools in this study. (Please see Appendix B for the list of sample). Community and institutional schools were included in the study not to compare them, but to depict classroom teaching learning practices in the schools as a whole.

Teachers: Two teachers in each school were included in the study in order to observe existing classroom teaching learning practices. Thus a total of 32 teachers were included in this study. Teachers are taken as the basic unit in this study and these teachers will be divided into control group and experimental group. Their performance will be compared in regard to classroom teaching learning practices in the follow-up study. Teachers covered in the baseline study will be divided into two groups when CT training is offered to the school teachers. At first schools will be divided into two groups – experimental and control group. Teachers of the experimental group school will receive CT training while the other group will not. Follow-up field work will be done after the teachers return to their schools upon receiving the training. Minimum number of the sample required, for making comparison in the experimental design, was considered for the follow-up study to be undertaken later with the introduction of CT in the experimental schools. For the experimental design 15 subjects per group would be acceptable sample size for comparison purpose (Gay, 1992). In the baseline 32 teachers were covered which makes 16 subjects per group.

Teachers' background information was collected so that characteristics of the teachers in the control and experimental groups could be described. Major characteristics of the teachers found is listed below,

- 75% of the teachers were male and 25% were female
- 22% were teaching at the primary level, 50% at the lower secondary and secondary level and rest at the primary, lower secondary and secondary level
- 50% of them were teaching single subject (28% Social Studies and 22% Science) while others were teaching two or more subjects
- 56% of the teachers were temporarily employed and 44% as permanent staff at schools. Average years of teaching experiences of the teachers were – 9.3 years as temporary and 6.3 years as permanent. Average years of teaching experiences of the teachers in the current school were 5.5 years.
- 5% of the teachers had only SLC. Teachers with 12, 14 and 16 years of last academic qualifications were 28, 34 and 22 percentages respectively. 15% of them had academic qualification in the field of education.
- 66% of the teachers had full training (10 months or above).

Lessons/Classes: Classroom teaching learning practices were observed in the Social Studies subject of Grade 5 and Science subject at Grade 8 in this study to depict classroom teaching learning practices of the teachers included in the sample of this study. In order to capture a complete or most part of a lesson, 3-4 consecutive classes of each sample teacher

were observed. Thus, altogether 105 classes (i.e. lessons) were observed. While on observation trips, the visits were not announced beforehand so that first day observation was completely unannounced observation.

Students: In order to establish the baseline of student participation and their activities in classroom teaching learning practices, their participation in the classroom teaching learning was observed in the whole class. For in depth study on some of the student related components 3-5 students per grade per school were sampled and sample work of these students were collected and analyzed. Altogether 423 works/lessons of students were collected and analyzed.

School level stakeholders: Head teacher/Principal, SMC, PTA, local leaders/parents were invited for the Focus Group Discussion/Group Discussion. One such discussion was held in each of the sample schools.

Study Components

This study covered various components related to classroom setting, teacher activities and student activities. These components were as following:

1. Classroom setting
2. Classroom teaching learning practices of the teachers
3. Students' participation, activities in classroom teaching learning
4. Perceptual information from stakeholders – students, teachers, head teachers/principals, SMC, PTA and parents.

Tools for Data/Information Collection

Data/information were collected by using these tools: 1) classroom observation form to depict all the activities in the classroom and its setting based on CT standards and rubric for the teacher and students, and 2) discussion guidelines and interview forms to collect perceptual information from stakeholders.

CHAPTER II

CLASSROOM SETTING

Classroom setting is one of the major features in effective classroom teaching learning. Seating in the classroom and classroom display are covered in the classroom setting. In this chapter classroom setting of the observed classrooms are described and analyzed.

Seating in the Classroom

Seating arrangement in the classroom itself speak a lot about possible teaching learning practices such as a classroom in which seat is arranged in a row and column arrangement indicates teacher as a speaker and students as passive listener. Row and column arrangement is most appropriate when students are required to look at the front most or all the time during the classroom teaching learning activities. On the other hand teacher can engage students in different activities and seating arrangement can be rearranged by placement of the students without changing placement of the desk and benches or other materials in the classroom for seating. The changes may occur during the lesson as needed. These aspects were guideline during the classroom teaching learning observation and recording of the classroom setting with respect to the seat arrangement. The major findings in this regard are described in the following paragraphs.

Material for Seating

Except in one classroom where there were low bench and cushion used for student's seating in the floor, rest of them had desk and benches for seating where 3 to 5 students used to share their seat. In one school there were chairs for individuals for seating in Science Laboratory.

Seat Arrangement

In all the observed classes seating was arranged in row and column-wise. There used to be a 'T' shape walking space in the front and between the two columns. In three of the classes, desks and benches were put in one column with walking space in the side making 'L' shape as shown in the pictures. Seat arrangement was consistently in row and column and no changes were made from day to day or within the lesson. In this arrangement students always face in the front, i.e. towards the teacher who happened to be in the front all the time during the classroom delivery. Only one class out of 105 observed classes desks and benches were kept in some distant to make teacher's movement easier between the desks and benches. This change was done on the third day of observation. Otherwise desks and benches were put together with no room between the rows of the desks and



benches even in the classrooms where there were enough space for making other types of seat arrangements.

Ease in the Movement

Out of the observed 32 classrooms, there were adequate room for easy movement for the teacher and students in 7 of them. In rest of the classrooms there were spaces just to walk for the students to take their seats or come out of the desk or for the teacher to walk in limited area of the classroom. This was what the classroom space and seat arrangement in the classrooms showed. But the use of available space by the teacher was very limited. Only in half of the cases teachers were found walk in the ‘T’ or ‘L’ space, otherwise they would confine themselves in the front – near the writing board.

Teacher Initiative in the Seat Arrangement

Seat arrangement and teacher’s movement in the classroom were found to be consistently the same all the time – from lesson to lesson or within the lesson. The slight change observed was in one case only where the teacher separated desks and benches within the row and walked around to reach student by student individually. In another case the teacher formed two benches as a group for the small group work, but there was no rearrangement of desks/benches made or seating arrangement of the students changed for the group work. It was rather a pseudo group formation where students in the front turned their head back for a while to talk with the students back to them. This was uncomfortable for the front row students and it made sharing difficult in the group.

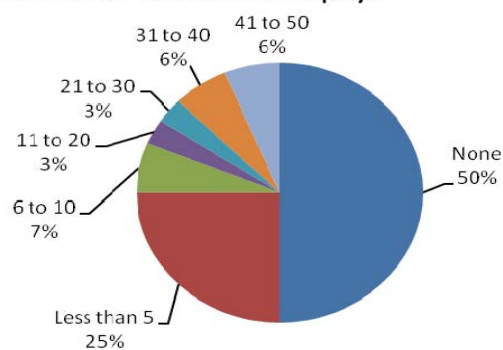
Classroom Display

Classroom display is a valuable teaching learning resource. Its effective use can create an atmosphere that can encourage students, link students’ experiences to the lesson, cater varied learning styles of the students. A well managed classroom display can create conducive environment for better learning for the students and also communicate the progress of the lesson in the class. Practices and effects of the classroom displays in the classes of the observed schools are presented in this section.

Preparation and Posting of the Classroom Displays

Out of 32 classrooms observed, there were not any kinds of displays on the walls of half of the classrooms. The number of the displays in the classroom in the 16 classrooms where there were some kind of displays, ranged from 2 to 49 displays. The distribution of number of displays in the classrooms is presented in the figure 2 and examples in the pictures. The number of the

Figure 2: Number of classroom displays



displays in these 16 classrooms was 251 in total. Most (86%) of the classroom displays were works of the students. Rest were either bought from the market (8%) or made by the teachers (6%). The displays were of various kinds such as:

- Quotations
- Charts
- Drawing (usually copied from the textbook)
- Cuttings
- Text from the textbook (written in large letter)
- Poems by students
- Greetings (New Year, festival, etc.)
- Classroom rules
- Calendar
- Wall clock
- Posters
- Pictures
- Newspaper cuttings, etc.



Use of Classroom Display

Considering the condition of displays in 2 of the classrooms, the displays were all old and not usable for the classroom instruction. In total 154 (61%) of the classroom displays were in usable condition. Out of 105 lessons observed during classroom teaching learning, in only one of the class display was used. That was also only occasion in which student's work was used during classroom teaching learning. In 99% of the observed lessons, classroom displays were not used during classroom teaching learning. Thus in which of the classes display were used, how these were used and what impact did the use of classroom display made could not be adequately analyzed in the baseline.

Lifetime of the Classroom Display

This study also attempted to find out how long a classroom display would remain in the classroom wall by asking about it to the teachers. Most of the classroom displays used to enjoy a long lifetime – usually duration of one year session period. Where there were quotations painted or posted by the school/teacher, these were supposed to remain until next repainting/washing by the school administration. Only in cases of 3 classrooms, there were more displays added during observation period. In only one case the material was prepared before the lesson. During the observation period not a single display was found to have been taken out from the classroom wall even though in some cases classroom wall were filled up and had started to look clumsy and some old display were torn or discoloured or faded.

Teachers' Views

Teachers were asked about their views on classroom display and their use during classroom teaching learning activities. Their responses were mixed, some responses are positive and some are indicated as barrier as presented in the following section. Figures in the parenthesis after the response indicate number of respondents.

Positive responses

- Teachers encourage students to prepare materials based on the lesson so that these could be displayed in the classroom wall (2)
- Teachers ask students to prepare materials, (but do not post them in the classroom wall) (2)
- Teachers assign material preparation as project to the students (but due to time constraint it is not practiced frequently) (1)
- Teachers often use local resources and drawing as instructional materials (1)
- Have displays in the classroom and these are helpful (6)

Others responses

- There is no practice to prepare and post the display materials (1)
- There is not enough time to prepare materials (1)
- Used to prepare materials in the past, but do not do so now (2)
- Do not post prepared materials due to fear of cheating in the examination (2)

Above responses indicates mixed reactions from the teachers about the use of classroom displays. Encouraging students to prepare materials for display is very positive, but utilizing them for effective classroom delivery is less.

Common Practice Regarding Classroom Displays

As indicated above classroom displays were mostly display of students' works. Such display of students' work would have been positive aspect for improving classroom teaching learning and also cost effective way of developing instructional materials. However practice of preparing the material after the lesson was over, restricted effective use of the classroom displays. Common practices of preparation and use of the classroom display were depicted as following:

- Teachers ask students to prepare chart, draw picture or write narratives related to the lesson after lesson was covered in the class. The assignment was mostly as homework for the students. Teachers select some of the good works and post them in the class. As the lesson related to the display material was already over, there was no need to refer the display any more. This was the main reason for displays not been used during classroom teaching learning. Thus classroom displays were not considered as teaching learning resources, but only a decorative material. Instructional values of the display were not much in the classrooms even where there were some kinds of the displays.
- Another practice found in the classroom display was that once materials were posted on the wall these were rarely changed. As classroom displays were taken for decorative purpose the displays remain posted and did not change with the lesson to be taught. Classroom display and students' works are not yet considered as learning resources.

CHAPTER III

INSTRUCTIONAL SETTING

The major objective of any educational institution like school is to promote student's learning which in turn is determined to a large extent by the instructional environment prevailing in the institution. The instructional environment should be appropriately arranged to create conducive climate to promote teacher-student and student-student interactions which ultimately facilitate in improved teaching learning in the classroom. Instructional environment in this context is analyzed in terms of teacher-student and student-student interactions in an instructional setting. Instructional setting mainly covers aspects related to teacher domain and student domain.

Teacher Domain

Instructional setting related to teacher domain covers: 1) instructional planning by the teacher, 2) delivery of the lesson, 3) learning climate during the lesson, 4) responses required and provided and 5) classroom questioning. These aspects are described in this section.

Instructional Planning

Written lesson plan was not found in any of the 105 observed lessons during classroom teaching learning. Overall evaluation of the lesson delivery and rating by the researchers showed that 68% of the classes were conducted by the teachers smoothly and confidently even though there was no written plan for the day's lesson. In case of remaining 32% of the lessons there were neither written lesson plan for the day's lesson nor was the lesson delivered confidently by the teacher. There were confusions on what to teach and what to achieve in the lesson. For example,

Teacher: What do you want to study today?

Few students: About SAARC countries.

Teacher: (Thinks for a while) Let us study about 'natural property'.....

In some cases teachers finished the lesson before the bell and there was still some more time left. Then the teacher either repeated some parts of the lesson or asked questions to the students on the lesson until the bell rang.

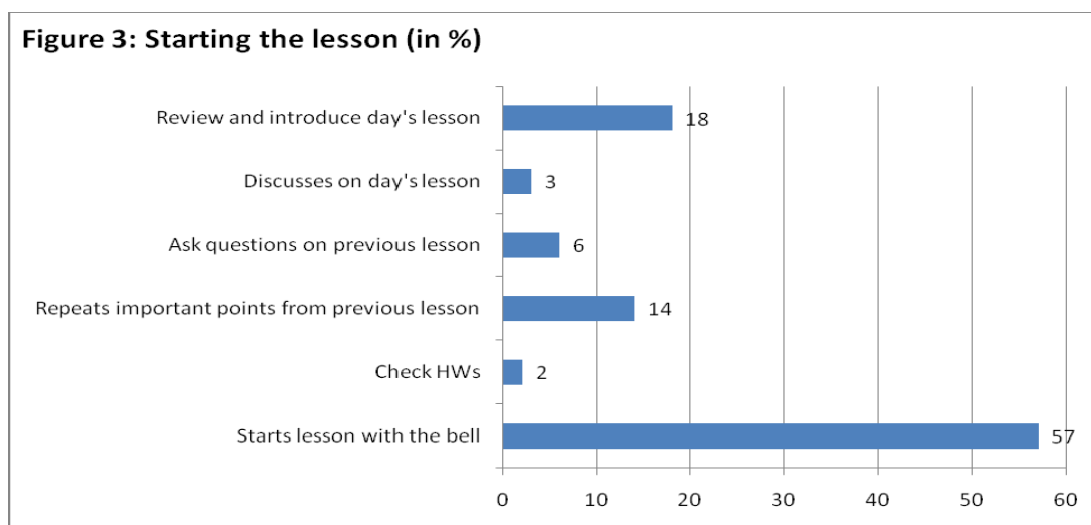
Most (69%) of the teachers informed that even though they did not write down their plan for the lesson, they used to have mental preparations for the lesson. The reasons for not having a written plan, but only mental preparations were as follows:

- No need of a written lesson plan as they were teaching same content for years and they were used to it (7)
- Due to heavy workload (6)
- Additional responsibilities given (1)
- Base classroom teaching learning in the textbook (6)

Teachers also informed that they used to prepare short/personal notes (2) or annual/monthly plan in their diary (3), but use of these plans were not seen to have been used during classroom delivery at the time of observation.

Starting the Lesson

First of all it is the students who should be motivated so that they take interest in lesson. It is good to find out where students are in relation to the lesson and start from that point as entry behavior. Linking with the experiences of the students, cater their interest and expectation are valuable starting points for the lesson. During lesson observation it was tried to depict teachers' practices in starting the lesson. It was found that majority (57%) of the teachers used to start the lesson with the bell without doing any pre-lesson activities or doing any anticipation activities as it is termed in CT strategies. Practices of the teachers in starting the lesson is presented in the following figure:



Delivery of the content was the focus from the start of the lesson in 57% of the observed classes. Even in 2% of the class time was spent on checking homework. In 14% of the classes teachers repeated important points from previous lesson and then started new lesson without any anticipation activities. Discussion or activities to introduce day's lesson was done in less than one fourth (21%) of the classes.

Learning Climate During the Lesson

In a classroom all are learner to learn from one another. This learning community can foster when communication crisscross – teacher to student, student to teacher and student to student during the classroom teaching learning activities. It was attempted to depict learning climate during the lesson. In this regard following aspects were observed and analyzed,

- Instructional methods employed
- Type of responses required by the teacher
- Approach to the curriculum content
- Crosscutting issues in the classroom
- Facilitation of students' participation
- Inclusiveness in the learning environment
- Time management for the learning activities

Instructional methods employed. During classroom observation main instructional methods used and communication events/episodes were noted down. All of the observed classes were consistently lecture style from teacher to students with other events/episodes of

shorter duration in between. Communication within the classroom during a lesson was mainly dominated by the teacher addressing to the students such as

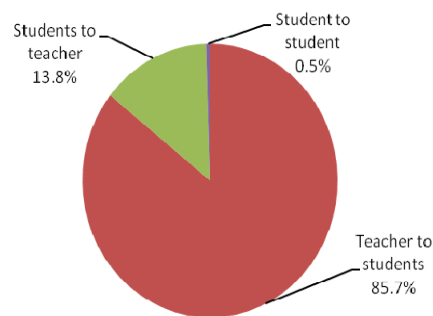
- Turn (specific page, chapter) of the book
- Submit your homework
- Have you read (memorized) the lesson
- Don't make noise/keep silence
- Read (from the book – page number/lesson paragraph)
- Listen carefully
- If you have question – ask
- Etc.

Teacher student communication which was 86% of the total communication episodes (classroom questioning not included in this category) in the classrooms which was mainly for managing the class as examples listed above.

About 14% of the classroom communications were directed from students to teacher as shown in figure 4. Student initiated communication to the teachers were mainly for

- clarification on the content matter covered in the lesson
- repeat the information/text for them to note down
- additional information
- pointing out teacher's mistakes such as wrong spelling written on the board.

Figure 4: Communication episodes (in %)



Student initiated communication was mainly for the supply of factual information. Only in one class there was communication from student to student (asking reason for the answer) and in one class teacher redirected student query to another student.

Teachers either lecture or paraphrase during classroom delivery. Teacher either read out from textbook by himself/herself or made student to read out from the book (shown in the photographs) and the teacher would add some interpretation and explanation or just repeat the content again. This was done by the teachers most of the time.



Students would be reading or following the text read aloud by a leader student or some of them might be distracted and doing something else or bored down as could be seen in the above photographs and photographs below.



Type of responses required by the teacher. CT approach emphasizes more on the learning process rather than recitation of the content on the basis of memorization. In this regard classroom observation and analysis was emphasized on the types of the responses that teacher's communication or questions required in the classroom teaching learning.

Responses required by the teachers were mostly formal correct responses, usually a standard one that every student should be able to reproduce. Those teachers considered better ones used to provide/dictate notes to the students which students memorize and reproduce in the examination to get better marks.

Out of 105 observed classes only in 4 classes, teachers had asked divergent questions. Out of these only 2 teachers encouraged and accepted divergent answers. Two of the examples are presented here.

Teacher question: In which region (mountain, hill or Terai/plain) would you like to live in? Why?

Students opted different regions citing different reasons for their choices which were – good climate, healthy environment, more food, like hot/cold climate, family members there, etc.

Teacher accepted different answers and also encouraged students to provide different reasons for their choices.

Which festival do you like the most and explain why?

Teacher occasionally waited for the students to complete their answers. Most of the time she interrupted and continued to explain herself a standard answer to the question. Though the question was divergent, diverse answers were not accepted.

During the follow-up interview, these teachers were asked about the divergent questions they had asked in the class. They seemed not to be aware of having asked divergent questions. It was not consciously planned or asked. It just happened.

Approach to the curriculum content. Teachers need to adopt different approaches for the classroom delivery according to the nature of the lesson. Within the lesson as well different activities and approaches might be required. Mostly lecture or paraphrase with questions

and answers in the whole class were the dominant approaches. Only in 5 of the classes students were found to have been involved in better ways to work or share in the class,

- Group works
- Guessing the lesson of the day (1 class)
- Practical/experiment

During the interview these teachers were asked about above techniques they had used in the class. From their response it was evident that they had not used these techniques in a planned way to promote cooperative learning.

Crosscutting issues in the classroom. Teachers were mostly not found to relate aspects or issues or information from other sources or lessons or subjects with the day's lesson. Crosscutting issues were not consciously brought in by the teacher during classroom delivery. Only in 5 lessons/classes teachers were found to relate day's lesson with other subjects – mostly referring to related mathematical formula in Science subject and Mathematics or relate day's content to the practical use in day to day life.

Facilitation of students' participation. Students should be provided opportunity to participate in the classroom teaching learning activities. They should be provided opportunity to interact among themselves as well. In the classroom mostly students participate in the teaching learning activities classroom as a whole and teacher also treat the class as a unit. During class work or verbally answering teacher's question students were involved individually as well. Otherwise out of 105 classes observed in only 3 classes there were events when students were required to work in small group. Students' were involved in the classroom teaching learning by the teachers asking them to read from the book or asking them question to answer or inviting students to ask teacher if anything was not clear from day's lesson or do some class work. This meant when teacher let more students read aloud for the class or ask questions to more students, then students' involvement in the classroom teaching learning would be higher. Otherwise there were no other classroom activities to involve students' in the classroom teaching learning activities.

Inclusiveness in the learning environment. Involvement of the students in the classroom process was mainly when teachers ask them question to answer (data on the number of the questions is provided in coming sections). When more students were asked questions, more students had chance to participate. During the classroom teaching learning distracted or detached students were also found. In these cases teachers used to command the students to maintain silence. Teachers were not found to do anything to involve students if any of them was not attentive or disinterested in the lesson. There was also lack of classroom activities to involve students.

Time management for the learning activities. Time management aspect were not easily discernable during classroom teaching learning observations due to these reasons: a) there were no written plan to compare teacher time management, b) teachers did not mention time for activities to the students, c) teachers mostly either used lecture or paraphrasing and in these methods most of the time is taken by the teacher and there would be little room for time management. During classroom teaching learning observation only one teacher was found to provide timed task to the students to complete it.

Classroom Questioning

Classroom questions by the teachers were analyzed in terms of numbers of questions, levels of the questions asked, encouragement to the students and facilitation for the students' response. Recording of the questions asked in the classroom teaching learning process was done following these aspects,

- If same question is repeated by the teacher to two or more students that question was recorded as one question only.
- If the same question was asked with slight variation, then that question was also recorded as one question only such as 'what is the atomic number of C/H/O....?'
- Give example of salt?... Give another example?..... Add more examples..... These were also recorded as one question only.
- Can you make sound of a cat/ a dog/ a goat.... These were also recorded as one question only.

If each of the questions asked were counted separately, then it would come to more than 45 questions in a lesson as well. But when repeated or similar questions were counted as one question only then maximum numbers of questions asked in a lesson comes to 22 during classroom teaching learning. In three of the classes there was no question asked either by the teacher or by the students.

Teachers were found to ask 9 questions during one class in an average. Out of 9 questions asked 8 were at knowledge/recall level and 1 at the comprehension level according to the Bloom's taxonomy of educational objectives. Some of the examples of the type of the questions asked in the class are presented below,

Knowledge level questions

- What is the definition of work?
- What is the unit of energy?
- How many oceans are there in the earth? Tell their names.
- What is the full form of 'SAARC'?
- Tell the names of elements from molecular formula 1 to 20.
- What are the organs of UN?

Comprehension level questions

- What is the advantage of serial combination of cells?
- Give examples of acid, base and salt.
- What is the difference between rarefaction and compression? Draw the picture.
- Why 'school' is considered an example of public property?

Only 4 questions were recorded at higher level in the observed classes. Following are the examples of higher level questions

- Now you know time period and frequency. Can you find out the relation between time period and frequency? (Students responses and discussion, clarifications followed in this question.)
- What happens when a small empty bottle is submerged in a big bucket or drum full of water? What makes it happen so?
- In your view how can UN play important role in keeping peace in the world?

Most of the questions asked by the teachers were at the lowest level of recall that students could immediately answer if they knew. In these cases encouragement or providing wait time were not much relevant. When the questions were more difficult or answers required a difficult content to memorize, encouragement and wait time were found to be useful. In this respect 18 of the teachers were found encouraging students to express which come to 2 episodes in an average per lesson/class. Similarly teachers were found facilitating students to response by providing them required time in 3 episodes in an average whereas teachers were found interrupting students in 0.25 episodes in an average.

Student Domain

Instructional setting related to student domain covers classroom questioning and student responses. These aspects are described in this section.

Classroom Questioning

The dominant pattern in the classroom questioning was teacher asking questions and students answering them. Questions were mostly asked to the class as a whole and answer would come in chorus from the class. In such practice it was difficult to note down number of episodes that questions were asked and answered either correctly or wrongly.

In average, students correctly answered 6 Knowledge level questions and 0.7 Comprehension level questions as against 8 Knowledge level questions and 1 Comprehension level question asked by the teachers in an average.

Besides teacher's questions to the students, questions by the students to the teacher or from one student to another student were also noted down. Only in 8 classes (6%) students asked question to the teacher. Among these episodes also mostly students asked question to the teacher when teacher told student to ask question if they were not clear about any of the content from the lesson. Even asking question among the students themselves to one another was not in practice. Only in one class 2 questions were asked by a student to other students during classroom teaching learning observation in the study.

Learning Qualities of the Students

Altogether 423 works/lessons of students were collected and analyzed to depict qualities of their answers to the question. Works of the students were of similar nature throughout the schools, grades and subjects. From the written works of the students following aspects were found,

- Students' works were mostly answering the questions given in the exercise in the textbook
- Some questions were given by the teacher as important questions for the examination
- Students' either locate answer to the question in the textbook and copy it or write them as explained by the teacher in the class which makes most of the students writing same answer word by word. Such answer was usually considered to be standard answer to the question. For example,

Question: Write 3 importance of classification.

Answer of the 5 students who were randomly selected from the class:

Three importance of classification are:

- 1) It gives us knowledge about the relationships between the plants.
- 2) It makes the study of plants and animals easy and scientific.
- 3) It gives information in favor of evolution.

- At grade 8 some of the teachers were providing notes for the students to copy and memorize and students try hard to memorize and reproduce answer from class notes or textbook. Emphasis was on the standard answer to be written in the examination.
- Some of the aspects related to students' domain were not observed as happening in the existing classroom teaching learning practices though these aspects were included in the study tools such as students' initiatives for learning beyond classroom; students' works that reflect coherence and cohesion in structure; students' initiation or activities; seeking resources; engagement in new strategies; etc.

Others Aspects

Besides teacher domain and student domain other aspects were also observed – assessment/evaluation practice and personal and professional qualities of the teachers. These aspects are presented in this section.

Assessment/Evaluation Practice

Classroom questioning, class work, homework in oral or written format were used by the teachers to find out if the students had understood the content of the lesson. But the outcomes of these assessments were not recorded by the teachers. Therefore teachers were not able to report learning progress of the students at a given point. They were able to express only their impression about the learning progress of a student should be at that point. None of the teachers covered in this study were consciously using formative evaluation for improving learning of the students nor were they emphasizing other development activities of the students such as cooperative learning, arguing with reasons, participation in the discussion, leading the group, etc.

Schools were using periodic assessment for evaluating students learning such as trimester, half yearly, yearly examinations in the public schools and monthly/unit, half yearly, yearly examinations in the private schools.

Personal and Professional Qualities of the Teachers

Teachers were asked in what ways they try to find out their shortcoming and overcome these to grow personally and professionally. None of the teachers were asking for peer feedback or seeking feedback from students about their teaching methods. However some of them used different ways to find out how their teaching was. For example,

- Self evaluation/reflection by some teachers
- Ask students if they understood the lesson or ask question on the lesson – if students knew that was taken to be positive otherwise teacher would try harder in the next lesson
- Students' achievement in the examination taken as an indicator of success of teaching performance
- Three of the teachers had sought written suggestion from the students on how he/she could improve teaching.

CHAPTER IV

STAKEHOLDERS' PERCEPTION ON QUALITY OF TEACHING

School level stakeholders – head teachers/principles, SMC, PTA, parents, teachers and students were asked about their perception on quality of the existing classroom teaching learning process and their suggestions for improvement. These aspects are presented in this chapter.

Perception on Classroom Teaching Learning

Head teacher/Principal, SMC, PTA and Parents group perceived classroom teaching learning mostly to be lecture oriented and teaching learning based on the textbook. Besides they commented,

- Students were not provided the opportunity to participate in classroom teaching learning activities
- There is lack of group discussion in the classroom
- Teachers do not prepare lesson plans which could be helpful to improve classroom teaching learning
- Result in the examination is more on focus (cramming for the examination)
- Rote learning and memorization is emphasized
- Teachers dominate the class and students are passive
- Teachers do not apply skills learned in the training.

They further expressed following aspects on the way of better teaching learning practices in the classroom,

- Heavy work load for the teachers
- High students teacher ratio
- Engagement of teachers in other activities – politics, tuition classes, own business, etc.
- Lack of accountability and commitment.

School level stakeholders were also concerned about need for increasing students involvement in the classroom teaching learning activities, making them active and fruitful learning rather than rote memorization and examination-oriented teaching. They were also concerned about teachers' workload and inadequate facilities in the classroom.

Whereas teachers expressed that they basically use lecture method in classroom teaching learning activities and textbook is the main guide in that process. Besides few of them said they also used following methods in their classes,

- Practical
- Demonstration
- Group discussion
- Classroom questions
- Involve students in the classroom teaching learning as much as possible.

Teachers however pointed out following aspects on the way of better teaching learning practices in the classroom,

- Crowded class (high number of students in the class)

- Heavy work load for the teachers
- Lack of teaching materials
- Lack of orientation to the teachers on the changed curriculum
- Heavy content load in the curriculum
- Pressure to do better in the examination
- Lack of training to the teachers
- Lack of modern facilities – audio-visuals, multimedia, etc.
- Lack of library, laboratory facilities
- Poor infrastructure in the school and classroom.

Teachers seem to feel several barriers that make it difficult to make the classroom teaching learning interactive, involve students and make them active. Crowded class, content load and lack of facilities were major aspects teachers felt for resorting to lecturing.

Students expressed that the classroom teaching learning they like most is the ones in which they have more chances to be involved. Though students were not able to express appropriately what classroom teaching learning should be like, they expressed what they like,

- More practical
- Information from out sources (rather than confining to the textbook only)
- More involvement of students in the classroom activities
- Extra-curricular activities
- Field visits/tours
- Library and laboratory facilities.

Suggestion on Improving Classroom Teaching Learning

The difficulties and hurdles pointed out by the school level stakeholders on the way of better classroom teaching learning practices are also suggestions for improvement. Specifically they suggest,

- Emphasize on student focused classroom teaching learning activities
- Teaching for examination should be discouraged, improve assessment practices
- Learning should be transformed into application
- More practical works
- Training/orientation on use of local materials in classroom teaching learning
- Clarity on course and curriculum required
- Promote student-teacher interaction and cooperation
- Change and improvement in the curriculum
- Updated Teacher’s Guidebook
- Increased teacher competency
- Provide required teaching materials
- Refresher courses to the teacher from time to time
- Demonstration of better teaching methods to the teachers
- Focus on students’ learning, not the textbook or course.

They also added these suggestions

- Limit class size to 35-40 students per class
- Less teacher workload (manageable workload to the teachers)
- Competent and qualified teachers only

- Teacher evaluation and incentives
- Improve school and classroom facilities
- Teacher's accountability.

Thus main focus of the school level stakeholders is to make classroom teaching learning more interactive with active involvement of the students. However they also feel a number of things to be improved at the classroom and personal level to improve classroom teaching learning practices.

CHAPTER V

SUMMARY

This study is intended to set baseline of the classroom teaching learning practices. Therefore this study has limited scope and will be complete with follow-up study. Conclusion drawn here are basically to support on planning of input, especially training to the teachers, and follow-up study. In this respect the major conclusion of this baseline study are drawn in following paragraphs.

- *Classroom delivery:* Classroom teaching learning is mainly focused on content delivery from the textbook. Content delivered by the teachers is either lecturing or paraphrasing. For paraphrasing either teacher read the textbook (few teachers do so) or students are made to read paragraphs from the textbook. After a paragraph is read the teacher rephrases or just repeats the content. For this method teacher preparation was not required much and students' interest was found to be low.
- *Level of interaction:* Critical thinking emphasizes classroom interaction at the higher level, not only at the lower level of thinking. This is one of the areas in which teacher preparation would be challenging, but very vital for improving quality of education. Classroom interaction, activities and questioning at the higher level is important. Equally important are the crosscutting issues, divergent questions, students initiatives to learn, learning beyond classroom, etc. These were not found to be taken into account in the existing classroom teaching learning.
- *Teachers' approaches:* Teachers were found sharing some basic approaches in the classroom teaching learning – treat class as a homogeneous unit and use the same approach to all and employ same method throughout the lessons. Diversity, learning styles, curricular nature and such other aspects need to be covered in the teacher preparation.
- *Seat arrangement:* Classroom seating also harmonize with existing teacher dominance approach in classroom teaching learning. As students are mostly required to face in front to the teacher and listen, seat arrangement for facing the teacher was most practical setting. Also ease in the movement in the class is not essential in such teaching learning practices. But if improvements in the classroom teaching learning practices are sought, then variety of the seat arrangements within the existing classroom environment need to be practically demonstrated to the teachers.
- *Classroom display:* Though in the 50% of the classrooms, there were displays, these were intended mainly for decorative purpose than using them as learning resources. It is praiseworthy that most of the displays were prepared by the students. Just timing the preparation of the display materials could U-turn the utilization of the displays for better classroom teaching learning. Therefore emphasis should be on preparing classroom displays before the lesson, use them during the lesson and post them on the classroom wall. Classroom displays should also change with the lesson as required.

- *Students in the classroom:* In the existing classroom teaching learning practices, students are passive learners who are engaged mainly for rote learning and preparing for examination. Equal participation from the students' side, students as provider of knowledge, active engagement and higher quality of their learning need much bigger room in classroom teaching learning.
- *Quality concerns:* As can be fathomed from the perception and suggestion from the stakeholders, classroom with active engagement of the students is necessary for improving quality of education. CT even considers other pertinent aspects for improving quality in education. CT orientation needs to cover these stakeholders so that stakeholders support the changes in the classrooms for quality in education.
- *Follow-up study:* Present study sets the baseline and necessary information/data to describe characteristics of the control and experimental group. These two groups need to be divided before CT training is provided to the school teachers so that experimental group teachers receive CT training and teachers from control group are not provided with the CT training for the study period. Basically the study design will be 'pretest-posttest equivalent groups design'.

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APPENDIX

Appendix A: Critical Thinking

CT is an approach to thinking that emphasizes stating original claims or opinions and supporting them with reasons. CT is used expressively when students make interpretations and support them verbally or in writing. It is used receptively when students critique other people's arguments. It introduces research-based, instructional methods to help students think reflectively, take ownership of their personal learning, understand the logic of arguments, listen attentively, debate confidently, and become independent, life-long learners. CT allows us to think about our own thoughts and the reasons behind our points of view. It means that we reflect on our own ways of making decisions or solving problems. Therefore classrooms should encourage students to think for themselves and engage in critical thinking. CT methods can be used in primary to higher education, for all subjects with existing curricula. CT methods are adapted for classrooms in order to promote:

- Active Inquiry
- Student-Initiated Learning
- Problem-Solving
- Critical Thinking
- Cooperative Learning
- Writing and Reading Processes
- Alternative Assessments (Crawford, Saul, Mathews & Makinster, 2005).

CT Program aims at stimulating innovation, creativity and critical thinking in education for active involvement of the citizens in community development. More specifically, the program looks at providing training for teachers, teacher trainers, educators, trainers, faculty members in designing of classrooms that model tolerant, open-mindedness, innovative thinking in the future graduates who in turn become independent thinkers. It also provides creative problem solvers, and competent citizens able to take an active role in the improvement of their society.

The CT works on the philosophy that citizenship in open societies is more likely to be found in the 'how' of education than in the 'what' of the education. That is, the means to democratic citizenship resides less in studying the content of subjects like civics or political science than in the daily conduct of classroom instruction in which opportunities are provided for cooperative work, decision making, critical thinking, opinion formation, and debate. These practices can be employed virtually on any subject, from basic reading and writing to literature, social studies, science, and mathematics. Additionally, these practices have proven to be successful in several content areas, viz. Girls Education, Gender Education, HIV/AIDS, Youth Involvement, Community Development, Leadership, Management, Project Management, Civic Education, Accelerated Language Learning, Cultural Diversity, Social Entrepreneurship, Crisis Prevention and Peace Building and many others.

Appendix B: Sample

List of School

District	School
1. Sankhuwasahava	1. Himalaya Higher Secondary School (U-Public) 2. Saraswoti Lower Secondary School (R-Public)
2. Lalitpur	3. Pragati Shiksha Sadan (U-Public) 4. Unique English Boarding School (Private) 5. Adarsha Saul Higher Secondary School (R-Public)
3. Nuwakot	6. Bhairum Higher Secondary School (U-Public) 7. Surya Jyoti Academy (Private) 8. Bhawani Higher Secondary School (R-Public)
4. Rupandehi	9. Rupandehi Lilaram Higher Secondary School (U-Public) 10. Bishwojyoti English Boarding School (Private) 11. Thuti Pipal Ma. V. (R-Public)
5. Surkhet	12. Shree Krishna (U-Public) 13. Children's Paradise (Private)
6. Kanchanpur	14. Bhrikuti (U-Public) 15. Sivalik (Private) 16. Bhanu Higher Secondary School (R-Public)

Note: R = Rural, U = Urban

List of teachers (not according to the order in the data tables, but alphabetically arranged)

Abbu Harera Khan	Kamal Shakya
Abdul Rahman Khan	Laxman Panta
Bhakta Bahadur Somai	Laxmi Bhandari
Bhandari R. Dhansingh	Laxmi Kharel
Bimala Bhatta	Lekh Nath Budhathoki
Binita Patel	Maheshwor Pd. Pandey
Chakra P. Mahara	Mathura Devi Khanal
Deepak Sapkota	Pushpa Rijal
Devi Hamal	Raj Kumar Shrestha
Dharmawati Khadka	Sabina Khadka
Goma Oli	Shishir Kumar KC
Govinda Pyakurel	Shiva Chapagain
Gyan Bhakta Maharjan	Sita Bhattarai
Harihar Aryal	Sudip Chhetri
Hirendra Kunwar	Y. B. KC
Indra Bahadur Ter	Youba Raj Khatri