

A Study on Multi-grade/Multi-class Teaching: Status and Issues



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Multi-grade/multi-class teaching situation is an unavoidable reality in Nepal. However, multi-grade teaching has been viewed as a temporary adjustment to instructional organization. Very little concerted effort has been made to change the existing face of multi-grade/multi-class teaching situation. Nepal's commitment for Education for All and its policy implications have resulted into the massive practice of teaching in multi-grade/multi-class situation in the schools of the country. Multi-grade teaching has been implemented as a combination of classes or to cover the teacher absent class, but not in its true sense of the term.

Basic and Primary Education Project II (BPEP-II) has set the goal of improving the access to and quality of basic and primary education through the adoption of different approaches. In this respect, it is essential to address the need of multi-grade/multi-class teaching in order to realise the above goals of BPEP-II.

This study is basically focussed on analysing the existing practice of teaching in multi-grade/multi-class situation and teacher training programmes with respect to multi-grade teaching. Besides, this study reviews the global concept of multi-grade teaching in order to draw implications for the Nepalese context.

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Abbreviations Used

APEID	:	Asia and Pacific Programme of Educational Innovation for Development
CDC	:	Curriculum Development Centre
CERID	:	Research Centre for Educational Innovation and Development
COPE	:	Community Owned Primary Education Programme
DEC	:	Distance Education Centre
DEO	:	District Education Office
DOE	:	Department of Education
DPM	:	District Project Manager
EFA	:	Education For All
FGD	:	Focus Group Discussion
FOE	:	Faculty of Education
FRAG	:	Formative Research Advisory Group
HMG	:	His Majesty's Government of Nepal
MCT	:	Multi-class Teaching
MGT	:	Multi-Grade Teaching
MOE	:	Ministry of Education
MOES	:	Ministry of Education and Sports
MOLD	:	Ministry of Local Development
MTOT	:	Master Training of Trainer
NCED	:	National Centre for Educational Development
NESP	:	National Education System Plan
NIE/Sri Lanka	:	National Institute of Education, Sri Lanka
PEP	:	Primary Education Project
PTTC	:	Primary Teacher Training Centre
RC	:	Resource Centre
SMC	:	School Management Community
TG	:	Teachers' Guide
TOT	:	Training of Trainer
UNDP	:	United Nations Development Programme
UNESCO	:	United Nations Educational, Scientific and Cultural Organization

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Executive Summary

The Context

Nepal is a country with diverse topography and sparsely populated areas, especially in the mountainous regions. The number of students in such areas is very low and therefore, teachers cannot be supplied to match the number of grades. According to government rules, teacher-student ratio has to be 1:40, 1:45 and 1:50 to supply teachers in Mountain, Hilly and Terai regions respectively. Such regulatory provision has created situation where supply of teachers would be less than the number of grades in remote and mountainous regions of the country. In such a situation where the supply of teachers is inadequate to the number of grades, there is a great need for adopting alternative approach to deliver primary education in order to ensure access to all primary school age children.

Problems like chronic shortage of teachers, inadequate number and size of the classrooms and teachers' absenteeism have demanded the application of multi-grade and multi-class teaching in the primary schools of the country. Multi-grade teaching is considered to be an instructional arrangement where children of more than one grade are taught together by a single teacher in the same classroom. In the other type of setting, separate classrooms for different grades are used by the single teacher to teach these grades at the same time. Both multi-grade and multi-class teachings need careful planning and preparation in order to organize instructional activities in the classroom.

Existing system of teacher preparation for multi-grade arrangement has two modalities: certification and training. Certification in education is provided by University and Higher Secondary Level with a few weightage given to the component of multi-grade teaching in the courses. The ten-month training (pre-service and in-service) for primary school teachers has also introduced the basic concept of MGT with minimum weightage given in the training packages. Multi-grade recurrent teacher training is being conducted in 40 districts through resource centers. However, existing curricular materials and multi-grade teacher training have not been developed to address the ground realities of multi-grade classes. It is obviously clear that improvement of the quality of primary education depends largely, among other things, on the extent to which the primary classes are managed and the teachers are prepared for the effective delivery of instruction in their multi-grade or multi-class situation.

Multi-grade teaching has long been a practice in both developed and developing countries with different institutional arrangements and modalities.

The above ground realities of different instructional organizations and their importance in improving the quality of primary education have inspired the researcher to conduct this study. Thus the main focus of this study lies on exploring existing situation and practice of multi-grade and multi-class teaching in Nepal.

Objectives of the Study

This study was carried out to accomplish the following objectives:

1. to explore the existing situation/practice of class-room teaching in multi-grade environment

2. to analyze teacher training programmes with regard to multi-grade teaching in Nepal.
3. to review global concept of multi-grade teaching and draw implications for the Nepalese context
4. to suggest viable solutions to overcome the difficulties faced by the schools in multi-grade teaching

Methodology

In order to conduct this study, relevant research studies, training packages and international documents on multi-grade teaching were reviewed. A field study was also conducted in line with the objectives of the study. Fifteen schools with MGT situation were selected from three districts: Rasuwa, Dhading and Rupendehi (5 schools from each district) representing three ecological belts of the country. Twenty-seven teachers including eight Headteachers were interviewed, 38 multi-grade classes were observed, three district level Focus Group Discussions with the trainers and two FGDs with central level teacher trainers and package writers were organized as well as one teacher training class was observed to get information pertaining to the objectives of the study. Two COPE schools in Kapilvastu district were observed and a FGD with district level trainers was also organized. Three types of Forms: School Survey Form, Class Observation Form, and Teacher's and Headteacher's Interview Form and FGD guidelines were used as the research tools for the study in order to collect the needed information.

Major Findings

Existing situation and practice

1. Among the primary schools of the sample districts, about 73 percent were found to have less number of teachers than the grades and the rest 27 percent were found to be complete teacher schools. Nearly 82 percent schools in both Dhading and Rasuwa had such situation whereas it was 53 percent in Rupendehi district. Considered from the perspective supply of teachers, greater possibility of having multi-grade or multi-class teaching is noticed in hilly and mountain regions than in the Terai region.
2. With respect to the teachers' involvement in different instructional arrangements multi-grade, multi-class and mono-grade (subject) teaching was found to be about 23 percent, 36 percent and 41 percent in the sample schools respectively. Comparatively, more number of teachers (50%) were involved in multi-grade teaching in Rupendehi than in Rasuwa (13.3%) and Dhading (6.7%) districts.
3. For 68 grades, there were only 60 rooms of which six rooms were used for office and store purpose in 15 observed schools. With respect to availability and use of rooms for teaching learning purpose, only 13.3 percent rooms were found to have been used for multi-grade (combined class) teaching and nearly 12 percent classes were run in open ground outside the building which can also be used for multi-grade teaching. When such situation is considered, multi-grade teaching seems to be a practice in 24 percent classes.

4. Teachers and trainers perceived MGT as an instructional arrangement where a teacher teaches by combining two or more grades at a time. They regarded MGT as a temporary adjustment for solving the problem resulting from the shortage of teachers. It was found that they could not differentiate MGT from MCT situation, rather they preferred teaching two grades in different rooms under the name of multi-grade teaching.
5. Teachers' guides were found only partially available in majority (86.7%) of the schools. Class observation revealed that even these partially available TGs were not used properly for teaching purpose by the teachers.
6. The schools were found to have used the following instructional settings:
7. Teaching same subject by a teacher for two grades in one room (48.1%)
8. Teaching different subjects by a teacher for two grades in one room (11.1%)
9. Teaching same subject by a teacher for two grades in separate rooms (30.0%).
10. Teaching different subjects by a teacher in separate rooms (11.1%).
11. Majority (81.5%) of the grades were combined as next to each other whereas only 18.5 percent were not combined as next to each other for both multi-grade/multi-class teaching purpose.
12. Almost all the teachers used traditional methods of teaching based on explanation, motivation by threat, unnecessary punishment, textbook dependent teaching and rituals of giving homework and class work.
13. Students' learning in teacher-absent classes was not managed properly which resulted either in passivity of the students or noisy environment.

Teacher training in multi-grade teaching

1. The strengths of TOT for MGT district trainers were found to have been the skills related to classroom management, construction of instructional materials, planning of self learning activities and preparing timetable for MGT class.
2. Transfer of teacher trainers, lack of experts in MGT, poor knowledge base of the trainers, low ability of the teachers to grasp the content of the training were identified as the major barriers to the effective delivery of the training.
3. The delivery of recurrent multi-grade training was effective in the use of skills such as class control, time management, use of monitor, and construction and use of timetable, which are considered useful for practicing MGT in the school.
4. It was found that the trainees were passive during the delivery of training and they were also reluctant to receive and use such training in the classroom situation.
5. The training was found ineffective in the areas like demonstration of the lesson by the trainer, implementation of micro-teaching, preparation of instructional materials and practicing of self-learning activities.
6. Multi-grade teaching techniques like the use of students' self learning materials, use of class monitor, use of learning corners and group work, appropriate existing arrangement, common instruction to all the students

before starting teaching were found almost absent in actual classroom teaching even though these skills were taught during the training period.

7. The pre-service primary teacher-training package has given 1.67 percent of weightage to multi-grade teaching, which comes to be 0.38 percent of the total weightage (1320 hours) of the package.
8. In-service primary teacher training, which is currently provided in two modalities i.e. certification training (10 months duration) and recurrent training (10 days duration) has given 9 hours of weightage (2.7%) to multi-grade teaching in the first package.
9. The recurrent MGT training package has given more emphasis on interactive and practical activity, but the contents of the package lack adequate exercises and the package does not differentiate of teaching in one room.
10. The recurrent MGT training package gives the overall impression of using mono-grade type of teaching in multi-grade/multi-class situation.
11. The main focus of the recurrent training package seems to be lying on covering the teacher-absent class instead of using it as a pedagogical choice for improving students' achievement.

Policy implications from other countries:

1. Since Nepal has the experience of multi-grade and multi-class situation, both approaches should be adopted with necessary clarification of their concept and techniques to meet the educational needs of the primary school children.
2. Adjustment of the curriculum or flexible use of syllabus has proved to be an essential feature of MGT in other countries. The need is therefore there to adjust our subject based mono-grade curriculum to MGT situation.
3. Self-learning activities based on self-learning guides are essential for teaching in multi-grade situation. Self-learning method is not possible to introduce for grade one students because they are still illiterate. As there is a practice of multi-grade teaching for grade one also, it is necessary to rethink about this situation in the above context.
4. MGT appears as a practice to combine two adjoining classes in a classroom (next to each other grades) for effective delivery of instruction. But reality differs from it, as in some cases the class settings of combination of grades – 2 and 4 or 3 and 5 are observed. This kind of practice should guide MGT methodology.
5. Small school concept has been a practice in developing countries with its proper definition and identification. This concept is equally applicable in Nepal especially in sparsely populated areas with a few numbers of students in the schools. The class size for multi-grade teaching (combination of more than one grade) should not virtually exceed 35 students.
6. In Nepalese situation, the first phase of the training should be related to the basic concept, importance and knowledge of MGT followed by practical activities like use of self-learning materials, demonstration classes, microteaching etc. Follow-up workshops should then be organized to provide regular feedback and support to the teachers and to address the problems of individual schools.

Recommendations

1. As the practice of multi-class and multi-grade is strongly prevailing in the schools of Nepal, a scientific mapping of such practice is strongly needed in order to identify the exact number of schools with multi-class and multi-grade practices.
2. As multi-grade and multi-class practices are considered more as temporary adjustment for solving the problem of the shortage of teachers, it is strongly recommended that the schools waiting for the supply of teacher quota, as per the increasing number of students' enrolment in the school, should be defined as multi-class schools whereas small schools of the rural-remote area where number of students is very low to get additional teacher quota should be defined as the multi-grade school.
3. MGT has been considered by majority of the teachers as an unwanted reality, on one hand, and they are practicing it as a strategy to meet the problem of stopgap teachers, on the other hand. It is, therefore, recommended that MGT should be treated as a necessity as well as a pedagogical choice with its reflection in the education policy of the country.
4. As the instructional and classroom setting was found differing from school to school in relation to classroom management, class size, delivery of instruction, students participation in learning, use of MGT techniques, it is, therefore, recommended that the government should develop basic specifications for the use of multi-grade and multi-class teaching, and implement them strictly.
5. As the MGT training proved to be inadequate, on one hand and poor knowledge-base of the MGT trainers resulted in poor delivery of training with a little transfer of MGT techniques into the classroom, the basic training package (2.5 months package for in-service and 5 months package for pre-service teachers) should include the MGT contents inadequate quantity and the trainers should be provided with essential and adequate exposure and training in MGT. Multi-class teaching situation should also be addressed while providing MGT training to the teachers.
6. To make MGT training demand-driven and need-based, coverage, intensity, and duration of MGT recurrent training should be duly addressed by making it more adaptable and flexible in its contents and instructional strategy.
7. The contents of the teacher training packages should be so selected and arranged that they should meet the need of both multi-grade and multi-class situation of the schools located especially in the rural remote areas of the country.
8. A strong monitoring, evaluation and feedback mechanism should be established in the district and school level in order to facilitate the effective use of multi-grade and multi-class teaching techniques.
9. The teachers who are working in MGT/MCT setting should be provided with more encouragement, material support and training inputs in order to help them develop positive attitude toward teaching in multi-grade and multi-class situations.

Chapter I Introduction

1.1 Context of the Study

Diversity of the country's topography and the existence of sparsely populated areas, especially in the mountainous regions, demand the planning of schools in a different way from that of the regular primary schools with teachers employed in proportion to the number of grades. In a situation where the supply of teachers is not made according to the number of grades, there is a need for adopting an alternative approach to deliver primary education in order to ensure access of all primary school age children to education.

Chronic shortage of teachers, inadequate numbers and size of the classrooms and teachers' absenteeism are such stark realities that demand the application of alternative approach of instructional organization or arrangement. The ground reality is such that most of the primary schools of the country are compelled to run primary grades with a small number of teachers. To address this problem, various teaching learning practices are in operation among which multi-grade teaching and subject teaching or grade teaching or mono-grade teaching have to be used as tentative instructional arrangement. The shortage of teachers is of course a potent cause for the introduction of multi-grade teaching in the school.

Multi-grade teaching is directed towards quality improvement. APEID/UNESCO (1989) has rightly mentioned that "Multi-grade teaching is not an answer to meeting teacher shortage in the educational systems but is a strategy to improve the quality of education in rural communities."

Existing practice of school teaching under the above instructional arrangement places the teacher in a situation where he/she has to teach more than one grade at the same time either in one room or in separate rooms by dividing his/her time between the grades and/or in classrooms. This practice has generated two situations in the context of Nepal: either more than one grade students are seated in a single room and the teacher teaches each grade by taking turn or each of the grades is seated in a separate classroom and the teacher teaches each grade in separate classrooms by taking turn. When children of more than one grade are taught together by a single teacher in a classroom, it is called multi-grade class. Multi-grade classes differ from regular classes where each class has its distinct grade with its own teacher and classroom. In the case of multi-grade teaching, it is referred to as the arrangement of a setting in which students of at least two grades are taught together by a teacher in one classroom. The other setting, which is different from this, has separate classrooms for different grades, but not the needed number of classrooms, where the single teacher teaches these grades by visiting the separate classrooms at the same time. This type of instructional arrangement is better known as multi-class teaching, which is the dominant feature of teacher-scarce schools other than the regular schools.

There are some compelling reasons for applying multi-grade/multi-class instructional system in the context of Nepal. One of the pertinent reasons is the inadequate number of teachers in the primary schools. Moreover, inadequate physical facilities of primary school, lack of financial resources, unwillingness of teachers to work in rural/remote areas and lack of trained teachers in multi-

grade/multi-class teaching are also the other reasons behind the obligatory use of multi-grade/multi-class teaching in the country. According to CERID (1988), two types of physical environment are found for the application of this type of instructional arrangement in Nepal. In the first situation, two grades are seated in one classroom and the teacher gives assignments to one grade while teaching the other grades and vice versa. In the other situation, one teacher takes the responsibility of teaching more than one grade at the same time. In the latter situation, each of the grades is seated in a separate classroom and the teacher teaches each grade in the separate classrooms in turn. The second type of instructional arrangement is however mistakenly considered as multi-grade teaching in the Nepalese context.

Nepal has made commitment to providing “Education for All” in different international conventions and forums such as the Dakar Conference, to ensure access to complete, free and compulsory primary education of good quality by 2015. (The Dakar Framework for Action, 2000). These commitments have served as an impetus to the government to establish primary schools in remote under-served and sparsely populated areas of the country. Since the number of students in such schools will be very low to meet the national policy of supplying teachers as per the number of students (teacher student ratio fixed for Mountain, Hill and Terai region is 1:40, 1:45 and 1:50), such a situation invites application of either multi-grade or multi-class teaching as an alternative way of providing education to all primary school age children. As the existing practice is to supply teacher quotas on the basis of the number of students enrolled in the school, lack of the required number of students in the schools of remote and rural areas of the country often results in the inadequate supply of teacher quotas for the number of classes. Since the dearth of teachers and students in a small village does not allow by rule the establishment of primary school in the remote mountainous and hilly regions, multi-grade school system of primary education has been very much in vogue in these regions of the Kingdom (APEID/UNESCO, 1989). This situation has led the teachers of these areas to teach more grades or classes at a time. Multi-grade teaching is not however taken by the teacher as a desirable mode in Nepal; it has simply become a temporary adjustment in the schools. Thus multi-grade teaching as a whole educational system has never been translated in real classroom practices in Nepal (Suzuki, 2000).

Multi-grade teacher training is being conducted in 40 districts of the country under recurrent training provided through resource centers in these districts. Similarly, some contents of multi-grade teaching are included in the educational course of primary teacher training programme. Existing curricular materials and multi-grade teacher training have, however, not been developed as per the need and ground realities of multi-grade classes. These problems further led to the deterioration of the quality of education, especially in the rural primary schools in Nepal, which are characterized mainly by multi-grade/multi-class teaching situation. Improvement of the quality of primary education, therefore, largely depends, among other things, to the extent the primary classes are managed and the teachers are prepared for the effective delivery of instruction in multi-grade or multi-class situation.

Multi-grade teaching has been a practice in both developed and developing countries of the world. Multi-grade teaching is usually considered as an issue or a problem in developing countries whereas many developed countries accept it as an effective strategy (Sibli, 2003). Internationally, it has been referred to variously in the literature as ‘multi level’, ‘multiple class’, ‘composite class’, ‘vertical group’, ‘family

class’, and, in the case of one teacher schools, ‘unitary schools.’ Thus multi-grade teaching is referred to as the teaching of students of different ages, grades and abilities in the same group (Little, 1995). Multi-grade teaching is an instructional arrangement demanding a situation where a school requires that children from more than one grade are taught together providing learning activities at an appropriate level for each grade, allowing all children to gain equal benefit from their learning experiences (NIE, Sri Lanka, 2003).

Different practices in multi-grade teaching have been identified in the international context. Little (1995) identified five examples of such practices pertaining to multi-grade teaching:

“A teacher education and support programme for multi-grade schools in rural areas in Zambia; the Esucuela Nueva (new school) in Colombia; NGO programmes for training indigenous and bilingual intercultural teachers in Peru; teacher-education-led developments at the school level in Sri Lanka; and the Instructional Management by Parents, Community and Teachers (IMPACT) system of mass primary education in Philippines, Indonesia, Malaysia, Zambia, Liberia and Bangladesh”.

These programmes use the strategies of multi-grade settings (cited in Little, 2001).

Thus the above ground realities of instructional organization in Nepal in particular and some experiences of some of the developing countries in multi-grade teaching in general have inspired the researcher to conduct this study. The study, therefore, is based on existing realities that guide the practices of instructional arrangement (multi-grade and multi-class teaching) in Nepal.

1.2 Objectives of the Study

This study was carried out to accomplish the following objectives:

- to explore the existing situation/practice of class-room teaching in multi-grade environment
- to analyze teacher training programmes with regard to multi-grade teaching in Nepal.
- to review global concept of multi-grade teaching and draw implications for the Nepalese context
- to suggest viable solutions to overcome the difficulties faced by the schools in multi-grade teaching

1.3 Significance of the Study

As multi-grade/multi-class teaching environment is a reality in most of the primary schools in Nepal, it is necessary to explore the existing practices of this type of teaching and adopt a viable system in the context of Nepalese primary education system. This study will, therefore, be of immense use to workout strategies to adopt the use of multi-grade/multi-class teaching as an alternative approach of the regular educational system in the country to address the problems such as shortage of teachers, resource constraints and wastage of teaching materials in the class having a small number of students.

1.4 Delimitation of the Study

Multi-grade/multi-class teaching is willingly or unwillingly a practiced reality of the country. Very limited research studies are conducted in this respect. Therefore the major focus of this study is to explore existing practices of instructional activities in the classes that have multi-grade/multi-class setting. Only three districts (Rupandehi, Dhading and Rasuwa) representing three ecological belts (Terai, Hill and Mountain) respectively were selected for the study. Since MGT has been a regular feature of Community Owned Primary Education (COPE), schools run under the Ministry of Local Development with technical support from UNDP, a review of two COPE schools was made to supplement the report with the teaching-learning experience recorded in these schools. Similarly one training session of recurrent multi-grade teacher training of 10 days duration was also observed.

1.5 Methodology

The following methodology was adopted to conduct this study:

- i. Review of related documents
- ii. Field study

1.5.1 *Review of related documents*

There are only a few research studies made in the area of MGT in Nepal. CERID conducted a research work on 'Multi-grade Teaching in Primary Schools of Nepal' under the sponsorship of PROAP/UNESCO. This study was reviewed to understand the concept of MGT used in Nepalese context. Similarly, some international documents were consulted to review the concept of MGT as used in other countries. Pre-service and in-service Primary Teacher Training Packages, Recurrent Training Package and Training of Trainers (TOT) manuals were also reviewed in line with the objectives of the study. Similarly, supplementary training package of COPE school was also reviewed for the study purpose.

1.5.2 *Field study*

The following procedures were adopted to conduct field-based study pertaining to the objectives of the study;

1.5.2.1 Sample selection

- Field study was conducted in three districts (Rupandehi, Dhading and Rasuwa) representing three eco-belts of the country (Mountain, Hill and Terai).
- Five schools with multi-grade/multi-class environment were selected from each district following purposive sampling procedure (Annex A)
- While selecting the schools care was taken to make representation of teaching more than one grade in one classroom and in separate classrooms.
- Twenty-seven teachers including eight headteachers were interviewed in line with the objectives of the study. Among them 10 had recurrent primary MGT teacher training and the rest 17 did not have access to MGT training. Teachers and headteachers whose classes were observed, were also interviewed for the study purpose.

- In the beginning, there was plan to select one class with multi-grade environment from each school for observation. However, more classes were observed and their respective teachers were interviewed. Thus the number of classes observed and teachers interviewed got increased. In this way 38 classes with multi-grade and multi-class situation classes were observed.
- One district level focus group discussion with trainees and district education personnel was organized in each of the three sample districts, in order to review MGT teacher training programme. One additional district level FGD was organized to review MGT teacher training programmes of COPE district (Kapilvastu)
- One training class was observed in Dhading and discussion was held with two teacher trainers. This was done to explore the training delivery strategy adopted by the programme.
- Two focus group discussions (FGD) with the teachers were organized. The first FGD was organized in Dhading to have discussion about the delivery of recurrent MGT teacher training and its applicability in multi-grade/multi-class situation. The other was organized in Rasuwa to discuss the existing scenario of multi-grade and multi-class teaching in the district and the need of teacher training for the teachers who were teaching in such a situation. Similarly, one other FGD was organized in Kapilvastu to explore attitudes of MGT and their cooperation for running MGT classes in COPE schools.
- Two central level focus group discussions, one with package writers and the other with central level trainers, were organized.
- Two COPE schools run by MOLD/UNDP in Kapilvastu district were visited to supplement the study report with project activities with respect to multi-grade teaching.

The details of sampling are presented in Annex B.

1.5.2.2 Research instruments

The following instruments were developed and used for collecting necessary data and information.

School Survey Form

This form (Annex C1) was used in order to collect the information such as: Profile of teachers including headteachers (qualification, training and experience, students' enrolment and their attendance, physical facilities of the school, record keeping system in the school, materials available in the school (including self-learning materials), and time-table (Daily routine) of the school.

Class Observation Form

Class Observation Form was used to obtain information related to the aspects such as (Annex C2) teaching/learning activities in multi-grade classroom, daily attendance of students, physical and instructional environment of the classroom, teacher's instructional behavior, students participation in the learning process, multi-grade and multi-class teaching situation, evaluation of teacher's instructional activities, use of monitor and teaching assistance in the classroom, and use of resource materials in the classroom.

Teacher's and Headteacher's Interview Forms

Teachers and Headteachers were approached with the same interview form in order to get the information related to (Annex C3) concept of multi-grade teaching, reasons for using MGT/MCT in local context, MGT teacher training: Its needs, strengths and weaknesses, areas to give emphasis, support provided to teachers in teaching multi-grade/multi-class situation, supervision of their teaching by district level education personnel, problems faced by Headteachers to run classes in multi-grade/multi-class situation, and opinions and suggestions for the improvement of classroom teaching in multi-grade/multi-class environment.

FGD Guidelines

Different FGD guidelines were prepared for district level teacher trainers, central level teacher trainers and package writers (see Annexes D1, D2 and D3) respectively. Necessary changes in FGD guidelines were made on the basis of the training background of the trainers. The following information was collected through Focus Group Discussions:

FGD with trainer (district level and central level)

- This guideline was prepared to elicit information with respect to teacher training for multi-grade and multi-class situation. This guideline included aspects like initiative or motivating factors for MGT/MCT, official procedure of the training trainers (TOT), delivery of training (TOT package and teacher training package - difficulties, feedback from participants, weightage of the training, practical aspects i.e. use of resources, instructional materials, practice teaching, strengths and weaknesses of the training, trainer's perspective in delivery of training, participants' perspective in delivery of training), preparation of trainers, scheduling of training, availability of training package and support materials, transfer of training in the classroom, barriers for the transfer of training in real classroom situation, and crucial problems/issues related to MGT/MCT and their possible solutions.

FGD with teacher training package writers

This guideline was prepared to organize discussions with MGT teacher training package writers. Discussion themes included in this guideline were historical perspectives of MGT, official process of package writing, preparation before writing the package, difficulties faced during development of the package, piloting/testing of the package, feedback from trainers, teachers and experts, comments on the package (adequacy and appropriateness of the contents, delivery modality, strengths and weaknesses of the package), and suggestions for improvement.

Resource persons from FOE, DOE, MOE and CDC were involved in the development and finalization of the tools. After completing the preliminary field study in Rupandehi some modifications in the tools were made.

1.5.2.3 Data collection procedure

As planned previously, the study covered three districts representing three eco-belts and five schools from each district. At least two teachers' classes were observed in each school except in the situation that there was only one MGT/MCT class or only one teacher present in the school. At least one class of all the headteachers was observed except where they did not have MGT/MCT classes.

The research team comprises researcher, research associate, resource persons and research assistants along with field assistants (mostly RPs of the concerned schools), the research team visited the District Education Office and consulted DEO personnel to plan the schedule of field visits and of focus group discussion with the district level trainers.

Then the research team visited the school and spent one full school hour in the school. Firstly, the team observed the scenario before starting the classroom teaching i.e., teachers' and students' punctuality, morning prayer, class routine of the school, etc. Secondly, the team started the observation of teaching by the teachers in multi-grade/multi-class. The research assistant along with the field assistant collected information with the help of School Survey Form. At least two persons of the research team observed one multi-grade class with the help of Class Observation Form. In the case of one room teaching-learning situation, the observers observed the teaching learning activities commonly whereas in the case of separate room situation, two observers observed the separate classes for the whole period. After observation the observers held discussions with each other regarding teaching learning activities in the observed class in order to assess the actual situation. Teachers/Headteachers, whose classes were observed, were interviewed. A short discussion was made with school teachers to make clear about some of the confused matters.

Focus Group Discussions were held in each district with the district level trainers. Two other FGDs were organized for central level trainers and MGT teacher training package writers. One recurrent MGT teacher training class was observed and a group discussion with the trainees was held in Naubise Resource Centre of Dhading District in order to identify the actual situation of the delivery of training. In addition to it, one other POD group discussion was held with the trainees of PTTC first package training in order to explore the situation of MGT/MCT in the individual school in particular and in the Rasuwa district in general.

The research team also visited two COPE schools of Kapilvastu District in order to supplement the study with similar type of MGT experience in community owned school initiated by project approach. The same procedures and tools were used to study MGT situation in these schools. A discussion session was organized with SMC member of four COPE schools in order to record their experience and their contribution with respect to MGT in the schools. Also, an FGD was organized at District Education Office with the district level trainers (COPE schools and public schools), and district level education personnel and project personnel.

1.5.2.4 Data analysis procedure

The data collected from the field and other available information from the secondary sources were tabulated, analyzed and interpreted as per the objective of the study.

Firstly, the research team analyzed the Rupandehi district information and discussed it with the concerned personnel. The discussion programme was organized by CERID to draw opinion pertaining to the information presented before the discussion group. Similarly, research reports and related literature were reviewed to explore the global context of MGT with a view to drawing educational implication in Nepalese context.

Secondly, the analyzed information, findings and other pertinent issues on the MGT/MCT situation in Nepal were shared with the concerned authorities.

Thirdly, the comments and suggestions drawn from the discussion group were incorporated in the body of the study report and its draft was prepared and presented before the FRAG members. The comments and suggestions recorded from the FRAG members were once again incorporated in the report before its finalization, then, finally, final report was prepared and submitted to CERID.

Chapter II

Global Concept of Multi-grade Teaching

2.1 The Context of Multi-grade Teaching

Multi-grade classrooms take a variety of organizational forms and instructional settings in different countries. Different countries have their own national context for making efforts to achieve the goal of Education for All. The following two EFA goals have their implications in creating situation for multi-grade teaching in different countries:

Goal 2 : Ensure that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and are able to complete primary education that is free, compulsory and of good quality.

Goal 6 : Improve all aspects of the quality of education and ensure excellence of all so that recognized and measurable learning outcome are achieved by all especially in literacy, numeracy and life skills.

In order to fulfill the above goals, countries that have made commitment towards these goals, have increased access to primary education so as to address the educational needs of all the primary school age children. This situation may lead to the opening of greater schools that demand more number of teachers, which the country cannot afford. This reality has created the situation of multi-grade and multi-class teaching in the country. No students should be deprived of the access to learning opportunities. In order to meet this goal, Nepal has made attempts to open schools in remote and rural areas of the country, which has resulted in the proliferation of grades in those areas in the excess of teachers supplied. In this context, an alternative arrangement of teaching has been unavoidable in view of the reality in our country. This reality has generated needs to be addressed with respect to clear-cut concept, strategy and approaches of multi-grade and multi-class teaching. In recent days, appropriate alternative has also been in practice as a pedagogic choice. How to make a multi-grade school an important instructional organization? How can it be possible to train the teachers in MGT techniques where mono-grade system has been deep-rooted in their practice? These and other similar questions are to be addressed to make multi-grade teaching a successful programme. In this context, the review of the practices of MGT in some of the countries seems to be essential. A brief review of MGT in five countries (Sri Lanka, Colombia, Zambia, Peru and Belize) was made under the themes of concept, status, instructional strategy and teacher preparation for MGT. This review will help one to understand the concept of MGT and implement it in its broader sense. The country-wise information is given in Annex E.

The system of teaching under the direction of one teacher has occupied a unique place since ancient period in Nepal. 'Gurukul' system of education is its example. This system is also termed as multi-grade teaching. Multi-grade classroom system has received new attention and importance these days all over the world. In the 1960s and 1970s, open education and individualized instruction had influenced curriculum and instructional models with the implementation of multi-grade classrooms in the United States (Miller, 1991). Multi-grade teaching has emerged as

an alternative instructional organization as a means to provide access to primary education to the children of rural and under-served areas of developing countries. Multi-grade teaching has been developed as a means of solving problems not addressed by graded setting of classroom teaching. It has been regarded not only as a proper means of saving money by combining the grades but also as a choice for better achievement in students' intellectual and social performance.

In this context, why cannot multi-grade classroom be arranged? Is it only a necessity imposed by economic and geographic conditions or is it a system of instruction with pedagogic choice? Why did some of the modern educationists propagate multi-grade, multilevel classrooms instead of grade specific classroom teaching in many developed and developing countries.? In order to get answers to these questions, a review of some examples should be done and an adaptable instructional organization of multi-grade teaching should be developed in the Nepalese context.

2.2 The Concept of Multi-grade Teaching

In most of the countries, a multi-grade teaching situation is defined as a teaching/learning situation where a single teacher teaches more than one grade or age group. In some countries, especially in Sri Lanka, multi-grade teaching is related to multi-level education in a single grade also. In Colombia, the new school (Escuela Nueva) concept was initiated as an unavoidable condition of multi-grade teaching in small schools of rural areas. Small schools of Zambia and indigenous schools in Peru are also the examples of multi-grade teaching. In Colombia and Peru, one teacher school in rural areas is also known as MGT School. Zambia and Colombia have addressed the multi-grade reality of rural primary schools. The Zambian experience is relatively small whereas Colombian experience is relatively large. Both the countries have involved external agencies and support from the government mainstream. In Peru, multi-grade reality is found especially among indigenous communities with the involvement of NGOs in providing training to the multi-grade teachers. MGT in these schools is the outcome of the following factors.

- Sparse pupil population in a geographical area
- Disparity in teacher deployment
- Unwillingness of teachers to serve in rural areas
- High rate of absenteeism of teachers in the school
- Teachers attending in-service training session
- The decreased quality of rural education as characterized by a greater use of passive pedagogy and unconducive environment of learning.

Multi-grade teaching in Zambia was started from a very small base in four schools with the expectation that multi-grade teaching would enable small schools to work efficiently without requiring additional classrooms and teachers. Similarly, multi-grade teaching emerged in Colombia with the initiation of unitary school system of one-teacher schools in sparsely populated rural areas. The Colombian one-teacher school has adopted active instruction, a strong relationship between the school and the community, and a flexible promotion mechanism that seems to be essential for multi-grade teaching. In rural areas of Peru, multi-grade teaching is the norm for most schools, be they multi-teacher schools or one-teacher schools.

2.3 Status of Multi-grade Teaching

Since not much research work has been conducted in the field of multi-grade teaching, the extent of MGT in different countries is difficult to explore. The other reason for this is that there is a narration in the practices of MGT in different countries. Little (2001), regarding the prevalence of multi-grade teaching, has mentioned: "Neither Ministries of Education nor international agencies such as UNESCO collect information about the number of teachers and students learning and teaching in multi-grade settings routinely. Information on its prevalence is scant." However, some attempts have been made to identify the status based on the definition of the respective countries.

Developed countries like France and Sweden have considerable percentage of multi-grade teaching scenario in primary grades whereas developing countries like India and Sri Lanka have MGT situation to a considerable extent (84% and 63% respectively). In developing countries, the situation may be that teachers were only teaching some grades and neglecting students in other grades for a large portion of the school day. Review of MGT in Peru also revealed that the vast majority of the multi-grade schools were located in rural areas. Similarly, 69 percent of the rural teaching force was involved in teaching rural primary schools with multi-grade classrooms. A research on multi-grade teaching in Belize revealed that 35.3 percent of the schools were fully multi-grade. This situation indicates that the use of MGT is in practice because of the adjustment problem, on one hand and providing pedagogical choice, on the other.

In India in 1996, 84 percent of primary schools had three teachers or less of whom 95 percent were in rural areas (Gupta et al., cited in Little, 2001). Similarly, in Sri Lanka 63 percent of all schools have four or less teachers (Ministry of Education and Higher Education, Sri Lanka, 1999). It was also identified that due to the less number of teachers than the grades, teachers used to teach some grades and consequently neglect students in other grades for large portions of the school day. In Peru some 78 percent schools are multi-grade; of which 41 percent have only one teacher and 59 percent have more than one teacher (Hargreaves et al., 2001 cited in Little, 2001). In Peru the vast majority (89%) of multi-grade schools are located in rural areas (Ministerio de Educacion, 1998, cited in Little, 2001).

In Vietnam in 1999 schools with at least one multi-grade class found 17 percent and the percentage of students receiving instruction in multi-grade classes was 1.9 percent of the total primary school enrolment (Vietnam MOET, 1999, cited in Little, 2001).

Industrialized countries were also found with the practice of multi-grade teaching. Little (2001) has cited some of such examples: in the northern territories of Australia in 1988, 40 percent of schools had multi-grade classes. Nearly at the same time Sweden and France had 35 percent and 22 percent of the classes in schools with multi-grade teaching (Little, 1995). In rural areas with scattered population in the United Kingdom the incidence of small schools was found. In the UK in 1997/98 6.3 percent of the schools enrolled less than 50 children that gave rise to multi-grade teaching. The incidence of small schools is greater in areas in the UK with more rural and scatter populations.

2.4 Positive Outcomes and Drawbacks of Multi-grade Teaching

Multi-grade teaching in these countries has been used to overcome the problems of graded teaching and with the belief that MGT can have the following positive outcomes:

- It can enhance independent learning.
- It encourages teachers to adopt pupil-centred approaches to teaching.
- It facilitates revision of materials covered in earlier grades.
- It increases pupil interaction.
- It provides opportunity to slow learners to make progress in his/her learning in his/her own pace of growth.
- It utilizes the concept of monitoring and peer tutoring to assist the teachers.
- It also promotes group learning.

In spite of the above positive outcomes and pedagogical benefits, some drawbacks are also observed as the following:

- There is the possibility of low student achievement in MGT schools if MGT programmes are not supported with required resources and properly trained teachers.
- These programmes demand teachers' more time and organizational capabilities.
- Teachers need intensive training with special focus on instructional materials.
- Students may receive less individual attention, and must often work independently.

Regarding the above realities of MGT in the global context teaching in multi-grade situation in Nepal seems to be lagging behind for MGT in Nepal therefore, needs a considerable attention toward its definition, orientation and practice.

2.5 Instructional Strategy of MGT

New school in Colombia has initiated the strategy to observe, think and write, at first individually then in groups. For MGT programmed learning materials in the form of students' learning guide and additional reading materials are found to be important learning corners in the four corners of the classroom and a small school library with about 100 books including dictionaries, reference books, children's literature, books on rural development and health are found standard facilities for 'New schools' of Colombia. Though work card and workbook strategy are highly used for teaching in multi-grade situation, direct interaction with the children is reported to be the most effecting strategy of teaching.

Flexible promotion and intensive teacher training strategies are also important for MGT situation. Both in-service and pre-service teacher-training practices are found important in different countries. Three one-week in-service training for multi-grade teachers and several follow-up workshops are very beneficial to the teachers teaching in MGT classes. Multi-grade teaching components in teacher education courses and involvement of university faculty members in teacher preparation for multi-grade teaching are adoptable experience useful for MGT strategy. Similarly, re-

organization of 1-5 curriculum into multi-grade curriculum with the production and use of graded learning guides has proved to be helpful in different countries. Teaching practice in mono-grade and multi-grade settings during training and teacher education programmes may provide adequate exposure for multi-grade teachers. Teacher educators and supervisors are also provided training in multi-grade teaching to develop their knowledge base in multi-grade teaching.

Chapter III

Existing Practice of Multi-grade/Multi-class Teaching in Nepal

3.1 Concept of MGT

Multi-grade teaching is regarded as an instructional organization where a teacher teaches more than one grade in the classroom at a time. However, multi-class teaching differs from it where a teacher teaches more than one grade in separate rooms at a time. Multi-class teaching refers to the situation where the teacher covers the class of other teachers to fulfill the gap created by teachers' absenteeism. Review of global concept of multi-grade teaching has made clear it that multi-grade teaching is not only the cause of teacher shortage, instead, it is a strategy to improve the quality of education as a pedagogical choice, on the one hand and address the need of the children of a sparsely populated area where the supply of gradewise teacher is not possible for the country, on the other.

This chapter presents the existing situation and practice of multi-grade and multi-class teaching along with teacher training practices in multi-grade teaching.

Almost all the teachers and trainers conceived multi-grade teaching as an instructional situation where a teacher teaches two or more grades in one classroom or separate classrooms. They expressed the following reasons for adopting multi-grade and multi-class teaching in the schools:

- i. Less number of teachers in the school than the grades
- ii. Less number of classrooms than the number of grades.
- iii. Teachers' absenteeism
- iv. Head teacher's involvement in administrative work
- v. Teachers' participation in training

As seen in the above list of reasons, it is obvious that teachers, headteachers and trainers were found to be confused about the term multi-grade and multi-class situation. The points (i) and (ii) above indicate the situation for multi-grade whereas the rest indicate the situation for multi-class.

Teachers were found to have dissatisfaction in teaching in the classes with multi-grade/multi-class situation. They regarded both the approaches of teaching as an extra load and these types of teachers did not help to improve students' learning. In this regard, one of the teachers expressed, "Teaching in multi-grade/multi-class is like a punishment (Saririk Yatana) for the teachers." Similarly, one headteacher of the sample school stated, "Multi-grade classrooms become noisy, difficult to control the students and hence disturb the teaching of the teacher." These statements reveal the fact that they have conceptualized MGT and MCT as unwanted instructional practice.

Community people were found reluctant to cooperate with the schools and were unaware of the teaching-learning situation of their community schools. Moreover, they were found to have realized the importance of observing instructional activities of these schools. Thus, it is indicative that community people cannot differentiate between multi-grade and multi-class teaching-learning situation of the community primary school. During the observation, it was found that community people were involved in improving the physical facilities of the school rather than in improving the instructional practice. The government also expects the same from the

community. In the same way, teachers perceived the need of community support only in physical and financial aspects of the school. Teachers were found not to have perceived the importance of community support and the skills in mobilizing the community for the benefit of multi-grade/multi-class teaching. One of the female teacher of the observed school expressed her feeling with respect to community help in the following words:

I was involved in the nonformal classes of the community and tried to make the community people aware about educational development of the school. Despite this, the community attitude toward the school could not be improved. The school had no land of its own. The landowner agreed to donate land to the school. But the community people did not take any initiative for owning the land through the legal process. This stood as a barrier for getting building quota (school lock) from the DEO. In such a context, what to talk about proper instructional arrangement!"

The above example indicates that teachers were not able to motivate the parents towards the improvement of their community school and make it as a center of learning with the proper use of available number of teachers and physical facilities of the school.

3.2 Status of Multi-grade and Multi-class Teaching

Teaching learning situation in primary schools of Nepal is found to have different types of arrangements such as multi-grade, multi-class, mono-grade (subject teaching, Grade Teaching). During interaction with the teachers and district level education personnel, it was noticed that there exists confusion between multi-grade and multi-class teaching. In order to explore the situation of both multi-grade and multi-class teaching, factors like teacher-grade relation, grade classroom situation, size of the classroom, average students per grade and teacher-student ratio have been studied.

The classroom situation where there is less number of teachers than that of grades has two implications: multi-grade and multi-class teaching. To explore this situation, schools with less number of teachers than the grades available were identified in the sample districts. The status of multi-grade/multi-class situation in the sample districts is presented in the following table:

Table 1: Schools with less and complete number of teachers

Number of Schools							
Rasuwa N=78		Dhading N=434		Rupandehi N=218		Total N=730	
LT	CT	LT	CT	LT	CT	LT	CT
64 (82.1)	14 (17.9)	354 (81.6)	80 (18.4)	116 (53.2)	102 (46.8)	534 (73.2)	196 (26.8)

Source: Concerned DEOs

Note: The figures within parenthesis indicate the percentage.

LT = Schools with less number of teachers than the number of grades.

CT = Schools with the complete number of teachers.

The above table shows that a majority of the schools of the sample districts were found to have less number of teachers than the grades. Only 26.8 percent schools had complete teachers or having equal or more number of teachers than the grades available. Districtwise situation of incomplete teacher schools reveals that there are

nearly 82 percent schools in both Dhading and Rasuwa districts with such a situation and 53 percent in Rupandehi district. It indicates that there is greater possibility of having multi-grade or multi-class teaching more in hilly and mountain regions than in Terai from the perspective of the supply of teachers. Teachers' involvement in the sample schools with respect to instructional arrangement has also been identified as seen in the following table:

Table 2: Instructional arrangement by number of teachers

Instructional Arrangement	Rasuwa	Dhading	Rupandehi	Total
MG	2 (13.3)	1 (6.7)	7 (50.0)	10(22.7)
MC	6 (40.00)	7 (46.7)	3 (21.4)	16(36.4)
MOC	7 (46.7)	7 (46.7)	4 (28.6)	18 (40.9)
Total	15	15	14	44 (100)

Source: Field survey.

Note: MG = Multi-grade; MC = Multi-class; MOC = Mono-Grade Class.

Figures within parentheses indicate the percentage

As the above table shows, 22.7 percent teachers were found involved in teaching in multi-grade arrangements whereas 36.4 percent and 40.9 percent of them were involved in multi-class and mono-grade (subject/grade teaching) teaching respectively. The table further shows that half of the teachers were involved in multi-grade teaching (teaching two grades by a teacher in a room or place) in the sample schools of Rupandehi district. However, very few teachers were involved in multi-grade teaching in the sample schools of Rasuwa and Dhading districts respectively. The table also indicates that a majority of the teachers were involved in teaching multi-grade and multi-class situation.

Availability of rooms and their proper use actually determine the situation for multi-grade teaching in the sense that less number of classrooms than the grades available has implication for multi-grade teaching. Only less number of teachers does not determine the necessity of having multi-grade situation; it may be multi-class situation also. The following table presents a picture of distribution of classes in different classroom settings.

Table 3: Distribution of classes in different classroom settings

District	No. of sample schools	Number of classes run					Total
		Single classroom	Single class + Office/store	Combined class	Combine class + Office/store	Class on ground (open space class)	
Rasuwa	5	16 (69.6)	2 (8.7)	4 (17.4)	-	1 (4.3)	23 (100)
Dhading	5	19 (82.6)	2 (8.7)	2 (8.7)	-	-	23 (100)
Rupandehi	5	3 (13.60)	2 (9.1)	2 (9.1)	8 (36.4)	7 (31.8)	22 (100)
Total	15	38 (55.9)	6 (8.8)	8 (11.8)	8 (11.8)	8 (11.8)	68 (100)
		44 (64.7)		16 (23.6)			

Source: Field survey, 2003.

Note: Figures within parentheses indicate the percentage.

The above table presents the picture that there were 68 grades in 15 sample schools with 60 rooms (see also table 4). A majority of the grades (44 classes) were run in

single classrooms of which nearly 9 percent (6 classes) were also used for both the office and store purpose whereas nearly 24 percent of these classes had combined arrangement (16 classes in 8 rooms). The rest 8 classes were taught in the open air or on the ground outside the school building. Classes in the open air can also have the practice of multi-grade teaching. It is, therefore, indicative that the probability of having multi-grade teaching setting may be more than 24 percent. The above reality indicates that the shortage of classrooms has created the situation of multi-grade teaching. It is further indicated that availability of rooms as per the number of grades with less number of teachers will change the situation of multi-grade to multi-class teaching.

Size of the classrooms also determines the setting for multi-grade teaching. A large classroom with adequate place for managing individual and group instruction is deemed necessary for multi-grade teaching. The number of rooms with adequate size as specified by the Education Regulations is presented in the following table:

Table 4 : Number of rooms with their size and use

District	Number of rooms						Total
	size			use			
	Adequate	Inadequate	Not decided	Single class	Combined class	Office store	
Rasuwa	12 (50.0)	8 (33.3)	4 (16.7)	18 (75.0)	2 (8.3)	4 (16.7)	24 (100)
Dhading	6 (24.0)	16 (64.0)	3 (12.0)	21 (84.0)	1 (4.0)	3 (12.0)	25 (100)
Rupandehi	1 (9.1)	9 (81.8)	1 (9.1)	5 (45.4)	5 (45.4)	1 (9.1)	11 (100)
Total	19 (31.7)	33 (55.0)	8 (13.3)	44 (73.3)	8 (13.3)	8 (13.3)	60 (100)

Source: Field survey, 2003.

Note: Figures within parentheses indicate the percentage.

As seen from the table, it is clear that of the total rooms available in the observed schools, only 31.7 percent had adequate size as per the number of students (according to the existing Education Regulations, the required classroom space for one student is 0.75 sq.meter/8.12 sq.ft). Of the total classrooms with adequate size, 50 percent were in Rasuwa followed by 24 percent in Dhading and 9 percent in Rupandehi. Since the number of students in primary schools of Rasuwa was less than in the primary schools of Dhading and Rupandehi, the rooms were found more adequate size in Rasuwa than in Dhading and Rupandehi. The other reality is that more combined classes were found in Rupandehi and the less combined classes in Dhading district. It is, therefore, indicative that a very few classrooms were found with adequate size in primary schools of Rupandehi. It also indicates that schools in Rupandehi district have less number of rooms than the grades in comparison to Dhading and Rasuwa districts. It was also found that only one room was found to be adequate for multi-grade teaching as per the above mentioned criteria in Rasuwa district. Since this calculation is based on the rule made for regular school (mono-grade class), size of this classroom cannot be considered to be adequate for multi-grade teaching. Moreover, only 13 students were found enrolled in two grades, which were taught by using multi-grade teaching technique (see Annex G). However, as the table presents, classroom size was found to be more adequate in mountain than in the Hill and Terai regions in relation to the number of students. Since a number of students per grade was found less in Mountain region, available

rooms were found adequate for regular classroom teaching. However, these classrooms will not meet the need of teaching in multi-grade situation.

It is desirable that for multi-grade teaching, the class size should not be larger than 35 students even when two or more grades are combined (NCED, 2003b). In multi-grade situation, teacher must work in such a way that he recognizes the needs, interests and abilities of the students and ensures that they have made their progress satisfactorily. The following table presents teacher student ratio and the average number of students per grade.

Table 5: Teacher student ratio and average students per grade by sample districts

Sample Districts	Total				Description		
	Students		Grades	Teachers	Absenteeism (%)	Teacher Student ratio	Average student per grade
	Enrolled	Present in class					
Rasuwa	385	329	23	15	56 (14.5)	1:26	17
Dhading	590	382	23	15	208 (35.3)	1:40	26
Rupandehi	773	401	22	14	372 (48.2)	1:56	35
Total	1748	1112	68	44	636 (36.4)	1:40	26

Source: Field survey, 2003.

Note: Figures in parentheses indicate the percentage.

As can be seen from the above table, teacher student ratio was found to be 1:40 in average, which is slightly above the national situation (1:37). Teacher student ratio is found higher in Rupandehi (1:56) than in Dhading (1:40) and Rasuwa (1:26). When the teacher student ratio is considered the possibility of having multi-grade teaching is found less in Rupandehi district than in Dhading and Rasuwa. However, the average number of students in the observed sample schools is found to be 26 in a class. If two grades are combined, it naturally becomes 52, which is not suitable for multi-grade teaching. The average number of students per grade was found to be 35, 26 and 17 in Rupandehi, Dhading and Rasuwa districts respectively. Since the number of students in a multi-grade class should be around 35, only the primary schools of Rasuwa district seem to be viable for having multi-grade teaching. Existing reality of more combined classes in Rupandehi district seems to be the cause of lack of adequate rooms in the schools which resulted in crowded classrooms in this district. It is, therefore, obvious that MGT as well as MCT can not be viable in this district.

3.3 Physical Environment of the Schools

Physical environment of the school is an important factor for managing teaching-learning activities properly in the classroom. All the sample schools were found with building having different numbers of rooms. However, in one school of Rupandehi district, one room building was there which was used only for office and store. Two schools in Rasuwa had inadequate number of rooms for all the grades as well as for office and store purpose. Only two of the 15 schools had compound wall, which was under construction. Sixty percent of them did not have compound wall and the rest of them had only partial compound wall. Very few classrooms were found to be adequate in size as per the government rule for mono-grade teaching. However,

these rooms were not found adequate in size for multi-grade teaching arrangement (see Annex G for details).

3.4 Instructional Environment

Instructional environment plays an important role in making classroom teaching more effective and conducive to learning. In this study, instructional environment needed for effective teaching in multi-grade and multi-class situation was studied and the findings are presented under the following headings:

3.4.1 Instructional planning

The multi-grade classroom can be more of a challenge than the single-grade classroom. Teachers teaching in a multi-grade situation need skills and behavior different from regular classroom teaching. Miller (1991) has identified six instructional dimensions affecting successful multi-grade teaching. They are, classroom organization, classroom management and discipline, instructional organization and curriculum, instructional delivery and grouping, self-directed learning and peer tutoring. In the context of Nepal, the government has neither developed any basic requirements regarding the above-mentioned dimensions, nor are they well addressed in multi-grade teacher training practices. In multi-grade or multi-class settings of instructional organization teacher should spend more time on organizing and planning of instruction in order to maintain continuity of students' learning, utilization of resources available in the classroom and promoting interactive, participatory and child centered learning in the classroom.

Multi-grade and multi-class teaching needs careful planning for appropriate management of teaching and learning. The main purpose of planning is the improvement of classroom teaching. In this context, observation was made to explore planning of instruction in the schools. It was found that only 53.5 percent of the schools had operation calendar. The practice was to prepare operation calendar through resource center or District Education Office and to distribute it to the schools. Monthly plans, unit plans and even lesson plans were not found prepared in the schools.

Preparation of daily routine is also a type of planning of instruction. Recurrent MGT teacher training has given emphasis to the preparation of timetable. With respect to preparation of timetable in the school, it was found that only 11 schools had prepared their routine for the current academic session. Four schools were following the timetable of the last year. With regard to the timetable, few teachers expressed the view that they did not feel necessary to follow the timetable. According to them, it was prepared only for a quick reference. The following things were noted after the observation of timetable used in the observed schools:

There was a regular gap in the routine. Subjects and teachers' names were not mentioned in some of the timetables. While asked about the gap, teachers mentioned that any teacher teaching in the next period of the gap class will cover the class and the students will not disturb the other grades in case of separate rooms teaching learning situation.

No fixed multi-grade/multi-class setting. Any grades were combined for the delivery of instruction such as 1 and 2; 1 and 3; 1 and 5; 2 and 3; 2 and 5, 3 and 4; 3 and 5; and 4 and 5 etc. It is indicative that teachers and headteachers were not aware of the basis of multi-grade teaching. Big gap of students' abilities, if grades not next to each

other are combined, may create problems in teaching students in multi-grade situation. However, multi-class teaching may have this type of setting in the sense of covering the stop gap classes because students with different ability are kept in separate rooms.

T and AMTC, (Teacher present and activity based monitor present class with teacher's short visit) in the routine. In Rasuwa district, Head teachers were taught about the preparation of timetable for multi-grade teaching. They did not however, use the timetable by following exactly its intention and spirit. In Dhading district, majority of primary school teachers had received recurrent multi-grade teacher training. However, they were found not to have given importance to the planning and implementing of daily routine meant for multi-grade class. Primary school teachers in Rupandehi district were found to have used timetable as in regular schools but not as required by multi-grade and multi-class situation.

Subject combinations in multi-grade/multi-class teaching. Three types of subject combination were found in multi-grade and multi-class teaching such as same subjects and different subjects for two grades and mixed subjects for more than three class combinations (two same subjects and one different subject). In some cases, teachers were found not to have used timetable properly. They did not care about the timing and planning of the instruction. One of the teachers in Dhading district expressed surprisingly that -

“There is no need of time-table because we are only two and we have to teach all the three grades at any cost.”

3.4.2 Instructional environment of the classroom

Regarding instructional environment of the classroom, cleanness, adequacy of light and ventilation, and furniture in the classroom were observed. The following table presents the picture of instructional environment of the observed classrooms with respect to the above factors:

Table 6: Instructional environment of the classroom

Situation	District						Total N=38	
	Rasuwa N=12		Dhading N=18		Rupandehi N=8			
	Yes	No	Yes	No	Yes	No	Yes	No
1. Cleanliness of the classroom	8	4	3	15	4	4	15 (39.5)	23 (60.5)
2. Adequacy of light and ventilation	4	8	12	6	6	2	22 (57.91)	16 (42.1)
3. Adequacy of desks and benches	9	3	15	3	1	7	25 (65.8)	17 (34.2)
4. Appropriate size of desks and benches according to the age of students	10	2	12	6	1	7	23 (60.5)	15 (39.5)

As seen in the above table, it is clear that a majority (60.5%) of the observed classes were not clean. Even a single classroom did not have dustbin. More than one third of the observed classrooms were found with inadequate light and ventilation, desks and benches, and the size of desks and benches are inappropriate according to the age of the students. The desks and benches were not arranged in a way as to make

the teacher's movement easy to reach each and every student and to manage individual and group work as required by multi-grade/multi-class teaching.

As far as the qualification, training and experience of the teachers are concerned with respect to impact on multi-grade teaching, qualification and training was found to have a positive impact on classroom teaching based on the observation of the research team. Surprisingly, it was observed that teachers with more years of experience could not perform any better in comparison to the teachers with less years of experience. Of the 44 teachers, 17 had more than minimum qualification for primary school (I.A.=14, B.A.=3). With respect to knowledge about multi-grade teaching, 30 teachers in total were found having minimum exposure to any type of training (recurrent training – 13, package training – 9, both recurrent and package training – 4) (see Annex H for relevant details).

3.4.3 Availability of instructional materials in the school

Instructional materials are useful for making teaching – learning activities lively in any type of instructional arrangement. To make instructional environment of the classroom child friendly student self-learning materials and other instructional materials play a important role. During the observation, it was found that all of the observed schools had child learning materials or self-learning materials, materials developed for promoting children's learning, developed by CDC and others in different numbers, the lowest being 8 and highest 43 in Rupandehi and Dhading respectively. Teaching learning materials other than self-learning materials were found in minimal number in the observed schools. A majority of such materials were purchased by the schools but some of them were made freely available by DEO and other institutions. Only a few of them were prepared by the teachers. Teacher made instructional materials were found only in three schools. Teacher prepared materials were students attendance charts (2), VDC map (1), letter blocks (1) and school map (1). Donated instructional materials were found only in four observed schools. One school of Rasuwa had adequate instruction and play materials donated by Chilime Hydro-power project.

Teachers' guides (T.G) were made available in most of the schools in different numbers. Two schools out of 15 did not have even a single TG in the school. In one of the observed schools a complete set of teachers' guides in all subjects was found. A majority of the schools had teachers guide in 'Mathematics, Mero Desh, Mero Serophero' only partially. A few schools had TGs in Nepali and Physical Education only. Only one school had TG in English. While asked about the not availability of TG in school, some of the teachers stated that they were taken away mostly by the headteachers and subject teachers to their homes. Teacher support materials other than TGs were also found in the schools. Among such materials were different training guides, primary school curriculum and curriculum guides and some self learning materials for teachers such as 'An approach to teach English', 'language and math teaching in primary level (see Annex I for details). CDC developed child learning materials were found helpful with respect to students' self- learning activities.

These materials were found in the box and cupboard in the office. In most of the schools, these materials were not used for instructional purpose. While the reasons for not using these materials in the classroom instruction, the teachers stated that headteachers did not motivate them in using these materials in the classroom. One

of the teachers in Rupandehi district said, with respect to the availability and use of instructional materials in the classroom, that:

“Some learning materials were available in the school but the headteacher kept them closed in the shelf and he went to the District Education Office.”

It reveals that these child-learning materials were not disseminated to the teachers, on the one hand and teachers did not know how to use these materials as self-learning materials in the classes on the other. The general trend with respect to the availability and use of self-learning materials shows that freely distributed and donated materials had the domination over teacher prepared instructional materials. It is indicative of the fact that this tendency will not help manage classes in multi-grade and multi-class situation. Teaching in multi-grade and multi-class situation without the use of teacher made and collected instructional materials will result in deterioration of students’ achievement in comparison to grade teaching.

3.5 Teaching Learning Activities in Multi-grade and Multi-class Situation

Delivery of instruction in the classroom depends on the extent the teachers and students are involved in different instructional activities. In multi-grade situation, the teacher has to manage two or more than two grades in such a way that all the grades should have equal opportunity to learn. Generally it happens that students learn better in teacher present class than in teacher absent class. The role of teacher in this context in MGT situation is to manage activities for continuous learning of the students even if he has to be involved with the other grades at the same time. With regard to instructional activities in multi-grade situation, factors like room setting’ combination of classes, same or different teaching subjects and time management are the influential contributors.

In this context, the research team tried to explore the existing classroom teaching-learning scenario in both multi-grade and multi-class arrangement of the sample schools. The whole periods of multi-grade teaching (in single room) or teaching in multi-class (separate rooms) were observed to explore teacher and students’ activities thoroughly with the help of class observation form. The following table presents the picture of classroom setting in observed classes (teaching in 38 classrooms by 27 teachers).

Table 7: Classroom settings in the observed classes

District	No. of		Class room setting		Total
	sample school	sample teachers	MGT (single room)	MCT (separate rooms)	
Rasuwa	5	9			9
Dhading	5	10	2	8	10
Rupandehi	5	8	8	0	8
Total	15	27	16 (59.3)	11 (40.7)	27 (100)

Source: Field survey, 2003.

Note: Figures in parenthesis indicate the percentage.

Detailed activities of teacher and students were recorded both in teacher present situation and teacher absent situation. The findings are presented under the following headings (for details, see Annex J).

3.5.1 Grade Combination

Of the 27 classes observed, seven types of grade combinations were found in operation. Grade combination, frequency of visits to each grade and frequency of observation, MGT and MCT setting of rooms and the subjects taught in the classroom are presented in the table below:

Table 8: Combination of grades for teaching-learning purpose

Grade Combination	Frequency of visits to different settings				Total
	MGT		MCT		
	Same subject	Different subjects	Same subject	Different subjects	
5 and 4	[2, 2] = 2 [3, 3] = 4	—	[0, 1] = 1 [2, 2] = 1 [3, 4] = 1	—	9 (33.3%)
5 and 3	—	—	—	[1, 1] = 2 [4, 4] = 1	3 (11.1%)
4 and 3	—	[3, 3] = 1 [3, 4] = 1	[2, 3] = 1	—	3 (11.1%)
4 and 2	—	—	[3, 3] = 1	—	1 (3.7%)
4 and 1	[2, 2] = 1	—	—	—	1 (3.7%)
3 and 2	[2, 2] = 1 [2, 3] = 1 [3, 3] = 3 [3, 4] = 1	[2, 2] = 1	[3, 3] = 1	—	8 (30.0%)
2 and 1	—	—	[2, 1] = 1 [2, 2] = 1	—	2 (7.4%)
Total	13 (48.1%)	3 (11.1%)	8 (29.6%)	3 (11.1%)	27 100%

Source: Field survey, 2003.

Note: The number within big brackets [] indicates frequency of visits to the respective grades i.e., in the first row [3,4] =1, refers to frequency of visits to grade 5 and 4 respectively and 1 indicates the number of observed class in separate room and same subject setting.

The above table shows that the grades were combined in two ways: one combination of two grades next to each other as grade 5 and 4; 4 and 3; 2 and 3; and 2 and, 1, the other combination of without successive grades (not being next to each other) such as 5 and 3, 4 and 2, 4 and 1. More grade combinations were found grades 5 and 4 (33.3%) followed by with grades 3 and 2 (30.0%) respectively. Least percentage of grade combination was found with grade 4 and 1 and 4 and 2 (3.7% each). In multi-grade teaching, successive grade combinations are generally accepted because of students' nearness in their abilities whereas unsuccessful grade combination will not be conducive to better learning because of their gap in learning abilities.

Table 5 also presents different instructional settings with respect to the classroom and teaching subjects. A majority (48.1%) of the classes was found with the same room, same subject setting of the teaching followed by separate rooms, same subject teaching (30.0%). Only a few setting percentage of classes were found with the setting of the same room, separate subjects and separate rooms, separate subjects (11.1% each). These instructional settings can be categorized into two types of instructional arrangements: same or different subjects in the same room or place

(multi-grade teaching) and same and different subjects in different rooms (multi-class teaching). Thus the table shows that 59.2 percent classes were observed in multi-grade setting and 40.8 percent in multi-class setting. Time denoted to higher and lower grades was found to be almost equal. Teachers did not use the concept of teacher present grade with their major involvement in one grade and his/her short visit in the teacher-absent grade, which is popularly known as “activity grade”. It is indicative of the fact that without the use of monitor and students’ self-learning materials, the concept of teacher class (T) and activity class (AMt) does not seem to have any implication for both arrangements of teaching. The teacher present class is directly managed by the teacher whereas the activity class is characterized by a short visit of the teacher where the active involvement of the class monitor is found to be minimal.

Teaching subjects and classroom settings are also major factors that influence teaching and learning activities in both multi-grade and multi-class situations.

The above table also presents the picture that in a majority (77.8%) of the classes teaching was conducted with same subjects in both the grades. However, teaching different subjects was also found taking place in a considerable number of classes (22.2%).

During the discussion with district level trainers and teachers, they opined that separate rooms and same subject combination of instructional arrangements were found to be effective. It is obvious from the above discussion that classes were run in one room because the schools did not have adequate rooms and different subjects were taught because they did not have the knowledge of the benefit that accrues from teaching the same subject.

3.5.2 Teacher- student activities

The main focus of classroom activities is students’ learning. Interactive and student-centered approach of classroom instruction is desirable for promoting students learning. In MGT class, it is even more desirable in order to continue and systematize students learning according to their learning pace and ability. In this context, for managing students learning efficiently in MGT/MCT situation techniques such as common instruction to the students before starting their learning, teachers’ preparation, time management, use of monitor, use of self-learning materials play an important role.

From the classroom observation, it was found that general instruction to the grades was hardly given and only one or two classes out of the 27 classes had released instruction. Similarly, there was no written lesson plan and a very few teachers were found confident in teaching. Moreover, preparation and use of instruction materials was found non-existent in the observed classes. Activity scenario of teacher-present class and teacher-absent class was observed as follows:

3.5.2.1 Teacher-present class

Almost all the teachers used traditional method of teaching based on explanation, motivation by threat, external motivation, unnecessary punishment, textbook dependent teaching, and rituals of giving class work and homework. During the observation, it was also found that while managing individual learning, the other students were found passive and the students of other grades in the same room were found diverted towards the teaching of teacher in other grades. However, trained

teachers were found to have used interactive learning and they paid individual attention to the students only to some extent though they did not use any instruction and self-learning materials in the classroom. In most of the classes, teachers, whether they were trained or untrained, gave class work as a means to make the student engaged in having them do textbook exercises. Teachers were found checking class work randomly whereas in most of the classes, homework was given but they did not check the homework. In this regard, one of the head teachers said:

“Checking the homework is an impossible task! If teachers were engaged in checking the homework who would teach the students?”

In teacher present class whenever class work was given, brighter students completed their class work earlier and no provision was made for their continuation of learning and co-operating with other students to complete their class work. Formation of students' group for teaching and learning purposed was found completely absent.

3.5.2.2 Teacher-absent class

In teacher absent class, the monitor/ teaching assistant or brighter students were not used except in one school where the monitor was used for a short period. The teacher introduced the monitor and focused his teaching on him. The monitor was not used to facilitate the learning of other students. The teachers only tried to cover the teacher absent class by giving out class work to the students. Class works were based on the doing of exercise of the book and reading the lessons loudly from the book. The whole period of time in teacher's absent class was not fully utilized for continuous learning. During that period, students were somehow engaged for some time until they did some given class work. In most of the time, they were found either passive or noisy. The management and continuation of students' learning was found to be a problem for multi-grade/multi-class teachers. Some of the examples are as follows:

In one of the schools of Dhading, the teacher told the research team that he was going to teach in grades 3 and 4 at the same period. He suddenly forgot and taught 3 and 5 grades together. One other example in another school of the same district was that a teacher taught 20 minutes more than the allotted time for one period. When asked after his class, he said that he did not follow the routine strictly and even ringing of the bell in each and every period was avoided. They used to ring the bell only for three times: at the starting of the class, before tiffin time and at the closing of the class. Another surprising observation in one school of Rasuwa district was that one teacher told the research team that multi-class teaching was set for grades 4 and 5. The teacher completed 45 minutes class in 37 minutes and did not enter into the other grades where both the grades were in different rooms.

The above examples show that teachers' planning of instruction in primary schools seems to be very poor that resulted into poor delivery of instruction and lack of continuation of students' learning. If this reality exists, multi-grade and multi-class teaching could not be an alternative instructional strategy for quality improvement in primary education.

3.6 Assessment of Teachers' Performance in the Classroom

Research team had observed 38 classes (16 single room classes MGT and 11 two-room classes MCT). Assessment of teachers' performance in the classroom was based on 38 observations. The same persons involved in this study made these

observations. Evaluation of classroom teaching was made on the basis of teachers' activities such as review of previous lesson, presentation, class activities, students' motivation in learning, checking of students class work and homework, evaluation of students' performance and use of blackboard, and text book. Classroom observation was made on five-point scale ranging from very good (5), good (4), average and (3) poor (2) to very poor (1). Observer's evaluation on teachers' classroom teaching is presented in the following table:

Table 9: Observers' Evaluation on Classroom Teaching

Activities	Rasuwa n=12					Dhading, n= 18					Rupandehi n=8					Total n=38								
	no	5	4	3	2	1	no	5	4	3	2	1	no	5	4	3	2	1	no	5	4	3	2	1
1. Review of pre-lesson	5	1	2	2	2	-	6	-	1	10	1	1	6	-	1	1	1	1	17 (44.7%)	1	4	12	-	-
2. Presentation	2	-	5	4	1	-	1	-	7	6	3	1	-	-	4	3	1	-	3 (7.9%)	-	16	13	5	1
3. Class activities	1	-	5	4	2	-	3	-	3	10	1	1	-	-	3	4	1	-	4 (10.5%)	-	11	18	4	1
4. Motivation	4	2	1	3	2	-	8	-	2	6	2	-	-	-	2	4	1	1	12 (31.6%)	2	5	13	5	1
5. Class work checking	1	-	8	2	1	-	3	-	5	8	2	-	1	-	1	4	1	-	5 (13.2%)	-	14	14	4	1
6. Home work checking	6	-	4	1	-	1	7	-	2	8	1	-	1	-	1	4	1	-	14 (36.8%)	-	7	13	1	3
7. Evaluation	3	-	2	5	2	-	3	1	3	9	2	-	3	-	1	4	-	-	9 (23.7%)	1	6	18	4	-
8 Use of blackboard	6	-	2	4	-	-	3	3	4	8	-	-	1	-	2	5	-	-	10 (26.3%)	3	8	17	-	-
9. Use of textbook	2	-	2	8	-	-	7	-	2	8	-	1	1	-	2	5	-	-	10 (26.3%)	-	6	21	-	1

Source: Field survey, 2003

Note: 5 =very good, 4 = good, 3 = average, 2 = bad, 1 = very bad

From the overall evaluation of classroom teaching in multi-grade multi-class situation review of the previous lesson, students' motivation in leaning and homework checking in the classroom was found to be either absent or little. However teacher's presentation of the lesson was found good in most of the cases. Similarly, class work checking was found good and average in most of the cases whereas performance of class activities was found in average in most of the cases. In case of motivation and homework checking, nearly one third of the classes were found without the use of motivation or in average. Similarly, in case of the use of textbook, use of blackboard and evaluation of students' performance in classroom teaching, nearly half of the cases were found in average and nearly one-fourth of the cases without such use. In all the 38 observed classes, there was no use of reference materials, students' self-learning materials except the use of regular teaching materials such as textbook, chalk, duster and blackboard. This situation indicates that teaching and learning in both the MGT and MCT classes were dominated by traditional approach; in other words 'chalk and talk' method of teaching has a dominant place in the observed classes of the sample schools.

3.7 MGT in COPE Schools

Community Owned Primary Education (COPE) Project began in April 2000 with the assistance of UNDP/Nepal. The project is executed and implemented by the Ministry of Local Development (MOLD) in partnership with the Ministry of

Education and Sports (MOES). The overall goal of the Project is to empower local people, communities and institutions in order to enable them to plan and deliver efficient and quality primary education through community owned primary schools with an alternative structure of school management. It is further expected to improve teacher performance and enhance levels of student learning (Gannicott et.al, 2002). The Project has created and operated 120 community-owned schools in the under-served areas of six districts (Achham, Baitadi, Okhaldhunga, Bajhang, Rautahat and Kapilvastu).

Senior teachers of COPE schools were provided with the first package training of NCED with 42 hours supplementary teacher training curriculum. The Primary purpose of this supplementary teacher training curriculum is, as mentioned in the package, to enable facilitate COPE teachers to provide quality education at COPE schools. This supplementary teacher-training curriculum carries 42 hours extra material in which MGT is given only 8 hours weightage. The expected teachers' competencies in MGT, as mentioned in the curriculum, are:

- apply appropriate classroom management techniques for multi-grade, multi-levels of pupils
- apply student-centred learning
- facilitate learning
- apply individualized and group assessment system
- apply individual teaching learning

On the basis of the above competencies content and approaches to demonstrate these competencies are developed. The curriculum, therefore, addresses the questions like: what teachers have to learn to achieve this and how teachers will demonstrate competency in multi-grade classroom? This supplementary curriculum has been developed by NCED. The other materials supportive to implement supplementary curriculum are the Manual for Training of Trainers and Resource Package for teachers.

Since COPE schools run classes up to grade 3, even though some schools have started to run grade 4, and two teachers (one senior teacher and the other facilitator) are supplied to them, these schools have, to manage multi-grade classes as an eventuality. One of the objectives of COPE Programme is to ensure equitable access to quality primary education for all that led to the development of more schools in remote and rural areas. This situation has also created the need of MGT in COPE schools.

Two COPE schools of Kapilvastu district were visited by the team in order to identify the existing situation of MGT in Community owned' primary schools and supplement the findings of this study with the study conducted in 15 public schools of three districts representing three ecological belts. A Focus Group discussed with district level trainers and a Group Discussion with SMC members of the four COPE schools were organized during the visit. The team conducted interview with teachers and discussed with District Project Manager about multi-grade situation in COPE schools.

One of the objectives of the COPE schools is also to enhance the level and quality of students' learning through improved teacher performance, activity-based teaching, stimulating school environment, and regular monitoring and supervision. This objective can not be fulfilled until there is adequate preparation of teacher and

supportive physical and instructional environment of the school as well as the provision of regular monitoring and supervision. One of the major characteristics of these schools is teaching in multi-grade situation, which needs adequate preparation and support on the part of the teachers.

During the visit to the COPE schools, it was found that teachers' knowledge about MGT was to teach two grades in a room at a time. They were not found alert about the space of the classroom as well as ventilation and light of the room, which are necessarily for creating conducive environment of learning. Both of the schools have compound wall / fencing and adequate outdoor space for students play and activities. As regards the indoor space for students' activities, the size of the classrooms in both the schools was found inadequate as per the standard mentioned in the Education Regulations (7th Amendment which is 0.75 sq. m. for each student). Since this standard is fixed for a normal grade classroom situation, multi-grade class should have even more than this defined size. Moreover, inadequate light, poor ventilation and low ceiling of the schools are not conducive to children's active participation in learning. The team observed a variety of instructional aids prepared by students and teachers in the classroom as well as in the office room. Among such aids were students attendance chart, pocket charts, flip charts, school profile charts, annual programme charts and collage. Other materials observed in the classroom as well as in the office room were quotations of great persons, clay models of birds, animals, and fruits, toys, letter blocks etc. Cleanliness of the classroom, collection of instructional materials and adequacy of desks and benches in both the schools and sitting arrangement accessible to all the children in the school presented are appropriate environment for participatory and interactive learning in the classroom. Both the schools however, lacked student learning materials developed by Curriculum Development Centre (CDC) of MOES/HMG, which were freely supplied to all the primary schools of the country. However, some of the DEOs have provided supplementary reading materials to COPE schools (COPE, 2002). Eventhough, some local materials were observed in the classroom, provision of keeping them in the box and almirah/cupboard and learning corners was not found. It indicates that rooms in COPE schools were not adequate rooms for improvement in teaching and learning activities as per the requirements for MGT. However, teachers were satisfied with their delivery of instruction and students were also observed enjoying their learning in the schools.

Teachers, however, did not give common instruction to the students before starting their teaching. They even did not use the monitor, though, there was such a provision for continuation of students' activities based on their pace and ability in one class while they were engaged in the other class. Single room, same subject for two classes (combined classes) was the approach used in multi-grade class. Grade one was also put in multi-grade setting.

Based on the discussion with district level trainers and educational personnel, SMC members and teachers, the information derived is presented as follows:

Initiation/ Motivation for MGT in COPE schools

Since the base line survey conducted in COPE districts indicates the number of school age children per class to be 35 (as stated by DPM), it was decided to keep two grades in one classroom and run MGT. The other reason for having MGT in COPE school was that these schools were run in sparsely populated and under-served areas of hilly and Terai districts.

Supportive factors for MGT in COPE schools

- Direct involvement of school management committee in school activities has the main source of inspiration for MGT in COPE schools; community people visit COPE schools and observe and inquire their children's progress.
- COPE teachers were given a total of 372 hours training comprising 330 hours of Basic Teacher Training Curriculum (2.5 months first package) and 42 hours of Supplementary Teacher Training Curriculum of COPE. MGT was given 8 hours weightage in the training. This 372-hour training was given to all the teachers of COPE schools. All the teachers, who were also called senior teachers, and the facilitators who are the teachers were provided 12-day training before they started teaching. This 12-day training was prepared by selecting and reorganizing some major contents of whole-school and modular recurrent training packages. While asked about well functioning of COPE schools with respect to multi-grade teaching, the school Supervisors and Resource Persons agreed that management of these schools was effective and the teachers were found very active. Locally made instruction materials and local resources were used to teach multi-grade classes in the COPE schools.

Availability of Training Packages and Support Materials

The Trainers expressed the view that COPE supplementary MGT training was based on participatory approach and more emphasis was given to micro-teaching. They also stated that the 12-day training was based on the adapted contents from different packages that may otherwise develop the competencies as envisaged the original package. Though the DOE has developed a ten-day recurrent training package in MGT, the COPE schoolteachers did not seem to have received this training. Since COPE programme is described as the innovative participatory teaching and community ownership of school is inevitable features, the District Education Office should provide teacher support materials and self-learning materials to these schools. During the observation, it was found that TGs were made available in the schools only partially but child-learning materials developed by CDC were not made available. A complete set of teachers' guides for the all subjects of the primary level was not found available in both the observed schools.

Transfer of Training

School Supervisors and Resource Persons also agreed that teachers were feeling difficulty in teaching multi-grade environment in both the public and COPE schools. They also disclosed that COPE schoolteachers were more active and regular in comparison to public school teachers. They however, feared that COPE schoolteachers were temporary and they worked hard for the security of their job in the future. Regular follow-up and monitoring enhances the probability of transfer of knowledge and skills learnt in the training period. Even though COPE schools were run under District Development Committee, they had to have permission from District Education Office. During the discussion with the district level trainers, it was noticed that they had rarely supervised COPE school. Despite this, the SMC of COPE school and even the community people had frequently visited, monitored and supervised the school as well as the teaching learning activities. One of the supervisors surprisingly said that one of the SMC members observed the COPE school, went to the public school to take the Headteacher on his motorbike and went

away from the school. In this way, supervision in public school was considered a ritual activity and not a practical necessity. But in case of COPE school, SMC members became alert to observe teaching learning activities in the schools. A large number of students in multi-grade classrooms and the small size (narrow space) of the classroom were the major barriers to the transfer of training in the classroom, as the participants expressed.

Suggestions for Improvement

The participants were requested to give suggestions for the improvement of multi-grade teaching in COPE schools. Their responses are summarized and presented as follows:

- The size of the classroom in COPE schools should be made larger while constructing new rooms for the schools.
- SMC members should be made aware of MGT and their responsibility towards their schools.
- CDC-developed child learning materials should be made available in all the COPE schools through District Education Office.
- Single room and same subject approach for MGT is convenient to make the students learn better. Therefore, the concept of MGT should be made clear to identify the problems of these schools for appropriate management of teaching learning activities.
- COPE schools had adopted some techniques of MGT which should be further strengthened by giving intensive MGT training to the teachers. For this, MGT training package should be revised.
- As the amount of MGT training given to the teachers of COPE school was inadequate, more intensive training should be given to the teachers with a rather broad coverage of MGT components.
- As coordination between District Education Office and COPE schools was discussed as a critical issue in the FGD, a strong coordination between the two in matters such as providing supplementary reading materials as well as monitoring and supervision of the COPE schools by the DEO staff is to be ensured.

Conclusion

The Community Owned Primary Education Programme (COPE), a pilot programme in decentralized planning and management of primary education, aims to build the capacity of the Local Government Bodies and communities in planing and delivering quality primary education as envisioned by the Local Self-Governance Act, 1999 (UNDP/COPE 2002). As an innovation for alternative schooling, COPE schools have accepted MGT and tried to manage better quality education and hence uplift the achievement level of the students. Some of the visitors, high-level government officials and educationists, have appreciated the contribution of COPE schools. The COPE schools are considered to be a 'Milestone', they have 'encouraged students' achievement' and 'Women empowerment has begun' are the remarks heard (COPE, April-June, 2002). It is indicative that COPE schools have ample evidence of success in many respects with regard to multi-grade teaching. Some practices in COPE schools like classroom management, continuous assessment of the students, regular

reporting and sharing of student progress with the parents, use of instructional materials, participatory and activity-based instructional strategy are found effective which may equally be applicable in public schools also.

The COPE schools also are facing some barriers in the effective implementation of MGT. These barriers include inadequate size of the classroom, inadequate light, poor ventilation, inadequate preparation of teachers in multi-grade technology of teaching, etc. Issues like retention of teachers, appropriate physical environment conducive to student-centred teaching and learning and sustainability of the spirit of teachers and recognition of multi-grade teaching in pedagogical perspective are to be addressed to make MGT effective in these schools.

COPE schools were found to have some positive experiences contributing to multi-grade teaching, which may be equally applicable to public schools. A provision for visiting COPE schools by school supervisors and resource persons will help them transfer the instructional strategies used in these schools. Besides, an in-depth study of COPE schools with respect to multi-grade teaching is needed to explore the strengths and weaknesses of instructional activities of these schools and disseminate the findings to the concerned authorities and educational personnel which may help transfer some effective instructional strategy to public schools, on the one hand and improve some weaker aspects of COPE schools, on the other.

3.8 Primary Teacher Training in Nepal

Teacher education in Nepal dates back to 1947 with the establishment of Basic Teacher Training Centre followed by the Normal Schools which replaced the Centre in 1956. These Normal schools were further replaced by permanent teacher training centres in the country in 1962. Since the establishment of teacher training system in Nepal, it has experienced various types of primary teacher training programmes. A major policy change occurred in the national education system which has its effect in corresponding policy change in the teacher training programmes for its growth and development (Shrestha, 1993). It has direct implications in primary teacher training system in the country.

The National Education System Plan (1971-76) made teacher training mandatory to be teacher and started providing ten-month training to primary teachers on a massive scale. This mandatory scheme was dropped later on. This frequent change in the basic policy of teacher training has resulted in the unsatisfactory state of primary teacher training (The Master Plan Team, 1997).

The primary teacher training programmes were launched by both the Ministry of Education and the Institute of Education (Now Faculty of Education). Ministry of Education was made responsible for short-term, crash programme of inservice training and the Faculty for running pre-service academic programme for the teachers. A variety of primary teacher training programmes were conducted during the 1970s and 1980's. Several innovative programmes on teacher training were developed and implemented during the 1980's (Shrestha, 1993). The government reduced the ten-month in-service training to five months which resulted in the absence of a sustainable long-term pre-service programme for the teachers. Project-oriented approach to teacher training system was introduced through the Seti Project, Basic Needs Programme, the Basic and Primary Education Project, Primary Education Development Project funded by different international donor countries/institutions. The duration of teacher training was further reduced to 150

hrs. training and more other fragmented teacher training programmes were implemented. Thus the institutionalization of teacher training system suffered a setback in that fragmented approach adopted in teacher training programmes, sometimes by increasing the duration of the training and sometimes by reducing it to a minimum of rituals ensued (Malla et al. 1993).

Government has made frequent changes in the duration and modality of primary teacher training, in-service and pre-service. The A Level and B Level training provided by T.U. Campuses, Radio Education Teacher Training Programme to the teachers of remote areas and the Seti Model short-term need-based recurrent in-service training in the Resource Centres which was later adopted by the PEP are some examples in this respect. The frequency changes in primary teacher training policy shows lack of long-term vision in meeting the training needs of the teachers. These changes have occurred without understanding their implications in enhancing the quality of education.

At present, in-service and pre-service primary teacher training programmes are being provided through different approaches. In-serve primary teacher training is provided through two modalities: one, 10-month primary teacher training programme and the other, 10-day recurrent primary teacher training programmes in different modules. The 10-month primary teacher training programme (PTTP) is being conducted from 1992. The 10-month PTTP is divided into four phases, each of 2.5 months' duration. The first and the fourth phases of this training are being conducted by NCED through its 9 Primary Teacher Training Centres (PTTCs) and Private Institutions. The second and the third phases are being implemented by Distance Education Centre (DEC) through radio broadcasts. The 10-day recurrent primary teacher training programmes are being conducted by Department of Education through its Resource Centres (RCs) in the districts in two approaches - whole school and modular. In the whole school approach, all the teachers of each school are provided training for some days in the RC, and for some days in their own school whereas in modular approach selected teachers from the schools are provided training in one of the 9 modules as decided by District Education Office. These short-term recurrent trainings are of 10 days duration. Pre-service teacher training is being provided by private institutions in two phases, each of 5 months duration. Multi-grade teaching has been addressed limitedly in 10-month primary teacher training packages (both in-service and pre-service). One of the recurrent primary teacher training programme is on MGT which is being implemented for in-service teachers.

3.9 Teacher Training in MGT

Without teacher training, management of classroom and effective delivery of teaching in MGT situation becomes difficult. The existing system of teacher preparation for primary school teachers does not give adequate emphasis to MGT. Teacher education courses of university (Proficiency certificate level) and higher secondary level have introduced the concept of multi-grade teaching in the curriculum only at a preliminary level that does not develop the required competency in teaching multi-grade classes. Similarly, inservice and preservice primary teacher training curriculum also has introduced only the basic concept of MGT with minimum weightage in its chapter. Of all the trainings, the 10-day recurrent multi-grade teacher training is one that has given more emphasis to preparing teachers for teaching in the classes with MGT situation.

In order to explore the existing situation on the delivery of MGT training, different discussions with district and central level trainers including package writers were organized. Furthermore, one district level recurrent MGT teacher training session was observed and discussion with the trainees and trainers was organized. The collected information with respect to delivery of MGT teacher training is presented under the following headings (see Annex M For details):

3.9.1 Delivery of Training of the Trainers on MGT

Central level trainers said that they did not have adequate knowledge base and exposure to MGT for the delivery of training. It was further discussed that there is lack of specialized trained manpower in MGT in the country. The above reasons and the need for refreshing the trainers to update their knowledge-base and skill make it necessary for them to be familiar with the new trends.

There is no officially defined procedure for the selection of the trainers for training of the trainers (TOT). General practice of selecting the trainers is their B.Ed. qualification and officer level educational personnel or secondary school teacher. For MTOT, concerned personnel of the training section of the Department of Education and for the DTOT school supervisors, Resource Persons and senior secondary school teachers were found to have worked as the trainers for the delivery of MGT TOT. A 10-day training is provided to the selected district supervisors to cover all the modular trainings developed by the DOE. The strengths of TOT for MGT were found to be the skills related to classroom management, construction of instructional materials, planning of self-learning activities and preparation of time-table for MGT class.

Transfer of trainers, lack of experts in MGT, poor knowledge-base of the trainers, low capacity of teachers to grasp the message of the training were expressed by the central level trainers as barriers to the delivery of training. Similarly, unconducive classroom environment, lack of support mechanism from local government and local community and teachers reluctance in using knowledge and skills learnt in the training were reported as factors hindering the transfer for the training in the classroom.

3.9.2 Delivery of Recurrent MGT Teacher Training:

The Department of Education has developed two modalities of recurrent training, whole school approach and modular approach. There are nine types of recurrent teacher training packages in which different trainings are provided to the teacher in rotation. Each of the modules including MGT has 10 days duration. These trainings are provided through cascade approach meaning that central level trainers provide training to the district level trainers in the center and these district level trainers with MTOT provide training to the resource center level trainers in the district. Finally, these RC level trainers provide training to the teachers.

Based on the discussions with the district level trainers, teachers, central level trainers and package writers as well as the researchers' observation of the training season and interview with the teachers who were teaching in MGT situation, the existing situation of the delivery of recurrent MGT training was analyzed. The officers working under the training section of DOE are providing training to the district level trainers. Central level trainers are providing training simply because they are working in that section. Central level trainers did not have the required

exposure and intensive training with respect to MGT. The DOE does not have any programme for their professional development pertaining to MGT teacher training.

Generally, two days session was allotted to MGT in the 10-days training of district level trainers. In a discussion with the district level trainers after observing their training session, they expressed the view that the TOT provided to them was not adequate with respect to necessary competencies to run recurrent MGT training at the Resource Center. The trainee teachers of the observed MGT class expressed that there was a need for two trainers in order to conduct the MGT training in an effective way. Regarding this, it was found that there was a provision of two trainers for each training. It is evident that although there is a provision of two trainers, it has not been implemented in the concerned districts properly. Public school teachers with government quota (permanent and temporary) were selected by the DEO for MGT training. During observation, it was found that a considerable number of teachers recruited under local resource (private teacher) were deprived of getting MGT training.

3.9.3 Strengths and Weaknesses of the Training

To identify strengths and weaknesses of the recurrent MGT training, one resource center based training class was observed. The research team also discussed with the trainers and trainees of the same programme. Teachers and head teachers were also interviewed regarding the same. During the observation of the training session it was found that the trainer was very active while presenting the content of the training package. The trainer used instructional materials including regular teaching materials (blackboard) effectively. The trainees found the delivery of training effective with respect to the skills useful for MGT such as class control, time management, use of monitor, construction of time-table and their use, and the use of instruction materials.

It was observed that the trainer was more active during the delivery of the class whereas the trainees remained passive. The trainer had formed the groups of trainers but the trainees did not work in the group. In other words, group was not functioning well. Trainers generally claimed that the duration of the training was not sufficient. However, during the observation of the training, it was found that the training was run only for seven days instead of the stipulated 10 days. The trainers also said that the time given for practical activities was not sufficient. However, the trainer used more time in theoretical deliberations than in the practical work. The trainer did not follow the schedule as stated in the training package. For example, the trainer delivered the lesson of the 5th day “construction of the self learning materials” on the 9th day of the training. The trainer, moreover, did not follow the distribution of time for classroom teaching as mentioned in the training package. For example, the trainer spent two hours in delivering the general introduction of the content (self learning activities) whereas only 30 minutes time was allotted to general introduction in the training package.

The overall observation of the training revealed the fact that the training was more theoretical than practical. Trainer’s response, in this regard, was that he did not conduct any practical work in training session resulting in to the completion of training before the stipulated time. Trainers, during their interview, also claimed that they were not trained adequately in order to deliver the training effectively by using participatory training approach.

The team also observed that the trainees were passive during the delivery of training and they were found not very responsive to the training. In this regard, one of the trained head teachers of Rupandehi district stated that the trainers liked to spend time without delivering the subject matter effectively which has made the trainees to be reluctant for active participation in the training. The trainees who did not teach in the MGT situation, were less motivated to learn the skills from the recurrent MGT teacher training.

Most of the MGT trained teachers and trainees were found to have the same opinion in that as they reported the training had been effective in the areas like demonstration of the lesson by the trainer, implementation of micro teaching, preparation of instructional materials and practicing self learning activities.

3.10 Transfer of MGT Training in the Classroom

Training is said to be effective to the extent the trainees transfer the knowledge and skills learnt in the training to their classroom teaching. To identify the extent of the transfer of MGT training in the classroom, MGT classes were observed and discussions were made with the MGT teachers and trainers. During the class observation, it was found that trained teachers (having recurrent MGT training) had adequate knowledge and skills in preparing the time table. But the teachers did not follow the time table properly. The training had developed the skills in managing multi-grade classes including the facilitation of students' learning. In this regard, one of the teachers in Rupandehi district said, "Before training, I was unable to handle even a single class effectively, whereas after receiving the recurrent MGT training I am handling two or more classes effectively". Trained teachers' class was found to be participatory and individualized to some extent. However, the competencies as expected by the recurrent MGT training package were found less demonstrated in classroom teaching. It was observed that even a single teacher did not use the technique of self-learning activities in multi-grade situation even though they had students' self learning materials in their schools (for details see Annex I and J) Other multi-grade teaching techniques like use of class monitor, learning corners, group work, preparation of lesson and common instruction to all the students in MGT class were not used in classroom teaching though these techniques were delivered during the training.

3.11 Assessment of MGT Teacher Training Packages

Currently, there are two approaches of primary teacher training: Pre-service and in-Service training. Pre-service training is provided by the private institutions or teacher training campuses whereas in service trainings are provided by both the government and private institutions. Teacher training curriculum, trainers' guide and training resource materials for the teachers are developed by the government through NCED/DOE. A brief review of these training packages in relation to the MGT component is presented below.

3.11.1 MGT in Pre-Service Primary Teacher Training Package

NCED has currently, developed pre-service primary teacher training package. This package is used by private PTTCs to provide training to the prospective primary school teachers. The training curriculum for pre-service teachers is of two 5 months semester. Each semester has 660 hours of session. Multi-grade teaching is given 5 hours session. The two-semester primary teacher training programme comprises

three major content areas: Primary Education in Nepal, Professional studies and Teaching Primary school subjects. Since professional studies comprises the fundamentals of teaching, Child Development and Learning, and Evaluation of Students' Achievement with 100 hours of weightage for each, MGT has got only 1.67 percent of weightage which comes to be 0.38 percent of the total weightage (1320 hours). The MGT component is included in the 9th unit of the course on Fundamentals of Teaching. The teaching competencies and contents included in multi-grade teaching are as follows:

Table 10: Teaching competencies and contents in pre- service training package

Teaching Competencies	Contents
<ul style="list-style-type: none"> ▪ Describe the situational context, characteristics and use of multi-grade teaching. 	<ul style="list-style-type: none"> ▪ Situational context, characteristics and uses
<ul style="list-style-type: none"> ▪ Explain ways of making effective multi-grade teaching. 	<ul style="list-style-type: none"> ▪ Plan of daily schedule
<ul style="list-style-type: none"> ▪ Prepare a plan for implementing multi grade teaching in the school 	<ul style="list-style-type: none"> ▪ Ways of improving multi grade teaching. ▪ Preparation of a plan for multi-grade teaching.

It seems to be difficult to deliver the above contents within the stipulated time. For example, the allotted time of about one hour seems to be insufficient for the delivery of the stated contents. The same type of contents is given a full day period (6 hours) in recurrent MGT training. The observation indicated that one full day period was still insufficient for the delivery of the contents. For effective multi-grade teaching, one needs to have practical skills of managing and delivering the contents as per the ability of the students. However, the above teaching competencies and contents have more focus on conceptual and theoretical aspects of multi-grade teaching. To make multi-grade teaching effective, teachers should have basic skills of classroom management, planning of instruction, developing and using self-learning techniques, preparation and use of instruction materials and continuous assessment of children's achievement but these skills are not adequately included in this package. This package should also address the other essential contents of MGT with adequate coverage and the time should be increased accordingly.

3.11.2 MGT in In-service Primary Teacher Training Package

The in-service primary teacher training is currently provided in two modalities; one certification training and the other is recurrent training. Certification training for primary teachers is of 10 months duration and recurrent training has 10 days duration. Both the training programmes have their own training packages.

3.11.2.1 MGT in Ten-month Primary Teacher Training Package

The ten-month primary teacher training is run by NCED through its primary teacher training centres, PTTCs, Distance Education Centre and private institutions. This training has four 2.5-month packages. The first package of 2.5 months is known as basic training package for primary school teachers. The main focus of this training package is on essential concepts and pedagogical skills. The second and third packages include professional and content studies focusing on in-depth studies of professional and content areas related to primary teaching. The fourth package deals with contextual application with a focus on application of knowledge and skills in different contexts. Both the first and fourth packages are to be delivered through face-to-face mode. These two packages are run by PTTCs, government/NCED run and privately run PTTCs. The basic training package is organized in blocks so as to promote active participation and meaningful learning by teacher trainers in given

thematic areas. Contents of the package are delivered through weekly distribution of training activities. Multi-grade teaching is included in the first package under organizing classroom for integrated teaching with 9 hours of weightage.

Situational contexts, concept, organization, benefits and combination of Grade on Multi-grade teaching are the contents included under multi-grade teaching. Grade teaching and multi-grade teaching are given nearly equal weightage. Inclusion of contents under multi-grade teaching of the in-service package indicates that due consideration has not been given to the skills essential for multi-grade teaching. The package includes content less than the contents of pre-service package. It is essential to note that both the trainees are mostly from similar background with similar qualification. Therefore same contents based on the expected competencies are to be included in the training package. Thus, the coverage and the duration of the training package should be increased.

3.11.2.2 MGT in Recurrent Training Package

There are ten recurrent teacher-training packages developed and implemented by DOE. One of them is delivered through whole school approach and the other nine packages are delivered through modular approaches. Multi-grade teaching is one of the 9 modular training packages. The duration of the training on multi-grade teaching as the other package is 10 days. As mentioned in the MGT teacher training package, there are four objectives of recurrent MGT training.

To prepare a plan of instructional activities for multi-grade teaching

To prepare self-learning activities needed for multi-grade teaching

To manage classes for multi-grade teaching

To teach students of two or more grades simultaneously.

The manual has also mentioned two situational approaches for organizing MGT classes. They are:

- i) When there are less number of teachers than the number of grades.
- ii) When the teachers take long term leave, when they are sick and when they are in training, MGT can be a temporary arrangement for running the classes.

The above statements also revealed the fact that the training packages are prepared to train the teachers in both classroom situations: multi-grade and multi-class. Moreover, multi-grade situation is described as an instructional organization caused by the shortage of teachers or supply of teachers less than the number of grades (see page 10 of MGT teacher training package). The training manual does not mention pedagogical cause for running multi-grade teaching. Moreover, it also does not mention shortage of rooms as the cause for running multi-grade teaching. All the recurrent training packages including multi-grade teaching do not have their curriculum.

Table 11: Day-wise contents of the recurrent MGT training package

Day	Contents
1)	▪ Types of instructional organization
	▪ Different MGT situations and
	▪ Need of multi-grade teaching
2)	Management of MGT (time table, classroom management, students' management, evaluation and record keeping)
3)	Multi-grade teaching planning and teaching technique (instructional planning, techniques of MGT, activities for contamination of teaching and learning.
4)	Teaching resources (with teachers' skills)
5)	Preparation of self-learning activities
6)	Use of instructional materials for student's learning activities.
7)	Demonstration lesson and preparation for practice teaching
8 & 9)	Practice Teaching
10)	Sharing on practice teaching experience, planning and implementation, preparation of a list of activities for using RC for effective multi-grade teaching.

A brief review of the training package reveals that objectives mentioned in the training package have given focus to practical activities. The contents are presented very appropriately with adequate illustrations and examples but they lack adequate exercises. It can be said that the package has given more emphasis to interactive learning and practical activities. The package has dealt with some contents such as preparation of time table, use of teaching resources and classroom management. The package does not present the situation of multi-grade setting, by contrast multi-grade teaching is presented in the context of one teacher teaching in two grades in different rooms which is rightly called multi-class teaching. Both the settings of instructional organization have different requirements for effective delivery of instruction.. Use of monitor has been mentioned in the time table but the effective use of monitor is not mentioned adequately. Regarding the involvement of teacher in the delivery of instruction in the classroom, three types of instructional settings are presented in the package, i.e. teacher present class (T), activity class with the involvement of monitor (AM) and activity class with the involvement of monitor and teacher's short-visit (Amt). Grade one is not included in the multi-grade setting except in one teacher school. The package gives the overall impression of mono-grade type of teaching in multi-grade situation. The package also lacks the adequate exercise on preparation and use of student learning materials in the form of programmed instruction and self-learning activities. Adequate emphasis is not given to micro-teaching and practice in actual classroom teaching is lacking in the package. The main focus of the package seems to be limited to covering the teacher absent class instead of taking it as a pedagogical choice for improving students' achievement.

Chapter IV Summary of Findings

The findings of the study have been derived from two ways: firstly, through the field visit and study, secondly, through the review of the related literature in the global context. This chapter, therefore, presents the findings based on the analysis and interpretation of data on MGT from the previous chapter under two major components:

4.1 Existing Situation and Practice

1. Among the primary schools of the sample districts, about 73 percent were found to have a less number of teachers than the grades and the rest 27 percent were found to be complete teacher schools. Nearly 82 percent schools in both Dhading and Rasuwa had such situation whereas it was 53 percent in Rupandehi district. Considered from the perspective of supply of teachers, is greater possibility of having multi-grade or multi-class teaching is noticed in hilly and mountain regions than in the Terai region.
2. With respect to the teachers' involvement in different instructional arrangements multi-grade, multi-class and mono-grade (subject) teaching in the sample schools was found about 23 percent, 36 percent and 41 percent respectively. Comparatively, a greater number of teachers were involved in multi-grade teaching in Rupandehi than in Rasuwa and Dhading districts.
3. For 68 grades, there were only 60 rooms of which 8 rooms were used for office and store purpose in the 15 observed schools. With respect to availability and use of rooms for teaching learning purpose, only 13.3 percent rooms were found to have been used for multi-grade (combined class) teaching and nearly 12 percent classes were run in the open ground outside the building which can also be used for multi-grade teaching. Considering a such situation, multi-grade teaching seems to be practiced in 24 percent classes.
4. Most of the classrooms were found to have inadequate space as specified by the Education Regulations (7th Amendment), i.e, 0.75 square metre or 8.12 sq.ft. space per student. Only 31.7 percent classrooms were found to have adequate size and only one classroom was found to have been used for multi-grade teaching. It further indicates that the size of the available rooms in primary schools is not adequate for having multi-grade teaching.
5. The teacher student ratio was found to be 1:40 in average, Rupandehi having higher ratio (1:56) than Dhading (1:40) and Rasuwa (1:26). The average number of students in the sample schools was found to be 26, Rupandehi having the highest (35) followed by Dhading (26) and Rasuwa (17). Both the teacher student ratio and the average number of students per grade were found comparatively less in Rasuwa district. It is, therefore, indicative that multi-grade teaching seems to be viable practice in Rasuwa district.
6. Classrooms were not managed in such a way as to make them conducive for students learning in multi-grade and multi-class situation. Most of the classrooms were found not clean and a considerable number of them were found with inadequate light and ventilation, poor facility and inadequate number and inappropriate size of desks and benches in the classrooms.

7. Teachers and trainers perceived MGT as an instructional arrangement where a teacher teaches by combining two or more grades at a time. They regarded MGT as a temporary adjustment for solving the problems resulting from the shortage of teachers. It was found that they could not differentiate MGT from MCT situation, rather they preferred teaching two grades in different rooms under the name of multi-grade teaching.
8. Almost all the schools had child learning materials developed by CDC and other institutions, the number ranging from a minimum of 8 to a maximum of 43. However, these materials were not used at all in the so called MGT classes.
9. Teacher prepared materials were found only in the three schools that too in a very limited number.
10. Teachers' guides were found only partially in most of the schools. Class observation revealed that even these partially available TGs were not used properly for teaching purpose.
11. The schools were found to have used the following instructional settings:
 - a. Teaching same subject by a teacher for two grades in one room (48.1%)
 - b. Teaching different subjects by a teacher for two grades in one room (11.1%)
 - c. Teaching same subject by a teacher for two grades in separate rooms (30.0%).
 - d. Teaching different subjects by a teacher in separate rooms (11.1%).
12. A majority (81.5%) of the grades were combined as next to each other whereas only 18.5 percent were not combined as next to each other for both multi-grade/multi-class teaching purpose.
13. Almost all the teachers used traditional methods of teaching based on explanation, maintaining discipline by threat, unnecessary punishment, textbook dependent teaching and rituals of giving homework and class work.
14. Students' learning in teacher-absent classes was not managed properly which resulted either in the passivity of the students or in noisy environment.
15. Some practices in the COPE schools like continuous assessment of the students, regular reporting and sharing of students' progress with the parents, use of instructional materials and participatory and activity-based instruction were found effective which can be equally applicable in the public schools also.
16. COPE schools are also facing some barriers like inadequate size of the classroom, inadequate light and ventilation in the classroom, inadequate preparation of the teachers in multi-grade teaching techniques.

4.2 Teacher Training in Multi-grade Teaching

1. The strengths of TOT for MGT district trainers were found to have been the skills related to classroom management, construction of instructional materials, planning of self learning activities and preparing timetable for MGT class.

2. Transfer of teacher trainers, lack of experts in MGT, poor knowledge base of the trainers, low ability of the teachers to grasp the content of the training were identified as the major barriers to the effective delivery of the training.
3. The delivery of recurrent multi-grade training was effective in the use of skills useful for MGT such as class control, time management, use of monitor, and construction and use of timetable which are considered useful for practicing MGT in the school.
4. Deliberation of recurrent MGT teacher training was found to be more theoretical than interactive and activity-based. Since the deliberation of teacher training was theoretical, the 10-day MGT recurrent training was completed well before the stipulated time.
5. It was found that the trainees were passive during the delivery of training and they were also reluctant to receive and use such training in the classroom situation.
6. The training was found ineffective in the areas like demonstration of the lesson by the trainer, implementation of micro-teaching, preparation of instructional materials and practicing of self-learning activities.
7. Multi-grade teaching techniques like the use of students' self learning materials, use of class monitor, use of learning corners and group work, appropriate sitting arrangement, common instruction to all the students before starting teaching were found almost absent in actual classroom teaching even though these skills were taught during the training period.
8. The pre-service primary teacher training package has given 1.67 percent of weight age to multi-grade teaching which comes to be 0.38 percent of the total weight age (1320 hours) of the package.
9. In-service primary teacher training, which is currently provided in two modalities i.e. certification training (10 months duration) recurrent training (10 days duration) has given 9 hours of weight age (2.7%) to multi-grade teaching in first package.
10. The recurrent MGT training package has given more emphasis to interactive and practical activity, but the contents of the package lack adequate exercises and the package does not differentiate teaching in one room.
11. The recurrent MGT training package gives the overall impression of using mono-grade type of teaching in multi-grade/multi-class situation.
12. The main focus of the recurrent training package seems to be lying on covering the teacher-absent class instead of using it as a pedagogical choice for improving students' achievement.

Chapter V Discussions

Based on the findings of the study, the following issues and areas for policy implications are identified:

5.1 Key Issues

1. **Physical and instructional environment of the school:** The classrooms used for multi-grade teaching are not large enough to run multi-grade classes in its true spirit. MGT classes are virtually the combined classes in the context of Nepal. Instruction in such a crowded classroom by adopting MGT techniques has been a difficult practice. It has therefore raised further issue of its continuation in its existing style or its techniques need to be redefined and readjusted to suit the existing classroom situation of the country. Separate room settings for teaching, and teaching of more than one grade by a teacher is considered as multi-grade class, which in fact should be treated as multi-class teaching. It is evident that the physical and instructional environment is not managed to reflect the intent and practice of MGT.
2. **Availability of educational resources and support materials in the form of teacher input:** Existing educational resources do not seem to adequately supplement the qualification and experience of the MGT teacher to run classes in MGT spirit. It has raised the issue of what sort of resource materials are to be developed to address teachers' knowledge with respect to teaching in multi-grade and multi-class situation. Thus, lack of adequate resources has blocked the transformation of the acquired knowledge and skills in the classroom with MGT and MCT situation. These two situations were blended in one training programme that happened to be the cause of confusion among the teachers for appropriate instructional arrangement.
3. **Teacher's preparation and knowledge base:** As the trainers were found with inadequate knowledge base and preparation, this inadequacy was reflected in the delivery of instruction in the MGT classroom situation. However, preparing teachers for MCT was not given due consideration.
4. **Dichotomy of mono-grade and multi-grade teaching:** As teacher preparation seems to be focused more on subject teaching in mono grade situation than on teaching students with multilevel abilities, the teachers are confronted with the difficulties of managing multi-grade setting with mono-grade teaching techniques. Presence of multi-class situation has made the teaching more complicated for the teachers.
5. **MGT/MCT as a pedagogic choice or compulsory practice:** MGT/MCT did not appear as a pedagogic choice, rather it appeared as an unwanted reality. This has resulted in the definition of MGT/MCT as a temporary arrangement and adjustment of instructional organization until the availability of class wise and subject based teachers.
6. **Successful implementation** To make multi-grade teaching a pedagogic choice, appropriate pedagogical training and materials are needed for its successful implementation. Appropriate instructional strategies and change in teachers' behaviors and teaching skills are basic requirements for both the multi-grade and multi-class arrangements of instruction. Attempts have to

be made to make multi-grade teaching a pedagogic choice which seems to be lacking in our context. It has been considered an alternative arrangement only for covering the gap in classes caused by teachers' shortage or their absenteeism. Moreover, multi-grade teaching should also be a practice in complete teacher schools not only in remote and unreached areas but also in towns and developed areas which have itself become an issue in our context.

7. **Interface of MGT training:** A short introductory concept of MGT in NCED's Basic Training Package, a 10-day MGT recurrent training package of DOE, the supplementary package of 42 hours prepared for COPE school teachers with a focus on 8 hour MGT techniques and the 12-day condensed training package of COPE including MGT techniques, have created confusion about the coverage, intensity and duration of the MGT training. This has further raised the issue of making MGT training a demand driven and need-based instructional organization.
8. **Monitoring and supervision of MGT activity:** Monitoring and supervision could not be developed as a feedback mechanism to ensure the transfer of MGT training in the multi-grade classroom. Even though School Supervisors and Resource Persons in the districts are responsible for the supervision of school programmes, due to the lack of adequate exposure and knowledge base in multi-grade/multi-class teaching, supervisory practices in primary schools have become only a ritual. Furthermore, application of MGT teaching techniques in the classroom has been monitored very little and supervised resulting in lack of basic information about the nature, purpose and concept of MGT in its true spirit.

5.2 Policy implications

1. **Basic specifications for MGT:** Variations are observed in the operation of MGT in primary schools in areas such as physical setting of MGT, teacher training, size of the class and teachers' qualification and number of students. In order to bring about uniformity in the concept and operation of MGT, there has to be a policy to develop basic specifications to run classes in MGT setting with minimum requirements met. Since multi-class teaching is a reality in primary schools, basic requirements to meet the need of multi-class teaching should also be identified.
2. **Data base of schools:** Existing school data does not allow one to derive information about the number of schools with multi-grade and multi-class situation because of the changing nature of the schools from multi-grade and multi-class situation to mono-grade situation. In some cases, multi-grade settings were found to have changed into multi-class settings when additional classrooms were constructed by the local community or by the government. Additional supply of teacher quotas as per the government rules may, further, curtail the possibility of multi-grade, multi-class teaching. What is, therefore, required is creating an updated database with the accurate mapping of MGT schools.
3. **Teacher preparation:** Existing teacher preparation system has prepared teachers mainly for subject based and graded system of instruction with little focus on MGT. A defined teacher training policy that requires the teacher

training system to address the existing MGT/MCT situation in the school is needed.

4. **Monitoring, evaluation and feedback mechanism:** Existing delivery of multi-grade teachers is little affected by existing supervisory practice which demands initiation of a mechanism to be working as close to the schools as possible to monitor, evaluate and provide feedback to the MGT teachers to facilitate their effective delivery. Field observation and interaction with School Supervisors and Resources Persons disclosed that they were not aware of maintaining this mechanism for the improvement in teaching learning activities in the classroom. Policy decisions are, therefore, to be made to address the problems of effective monitoring, evaluation and feedback.
5. **Professional support:** Regular professional support to the teachers in the form of recurrent and refresher training and follow-up workshops and seminars has not been provided as expected by the teachers. A policy is, therefore, needed that clearly states the necessity of providing such support to the teachers teaching in multi-grade and multi-class situation on a regular basis through the governmental and non-governmental organizations.
6. **Curricular adjustment:** As the existing curriculum of the primary level is more subject based and grade oriented, it has little flexibility to accommodate multiple abilities of students at multi-levels or multi-ability levels. It is, therefore, in this background important to make the curriculum flexible enough to allow the teachers to organize and adjust instruction around the multi-level abilities of students in multi-grade and multi-class settings.
7. **Policy implications from other countries:** Development of a nation has been affected by global context and its developmental trend is judged in international perspective. Since MGT in Nepal is a recent concept, its practice should be observed along with international perspective and necessary arrangements should be made to ensure achievement of the students. The MGT practice should be reviewed along the experiences of other countries which have success examples of multi-grade teaching. In order to have a deeper insight into the understanding of MGT as an instructional organization, a review of MGT practices in five countries have been made with respect to concept and status of MGT, instructional techniques, teacher preparation and support materials. Hence the drawn implications from these experiences of other countries for Nepal will help develop MGT as an instructional techniques to ensure access and quality education to the children, especially from rural remote areas of the country.
 - Since Nepal has the experience of multi-grade and multi-class situation, both types of these alternative approaches should be adopted with necessary clarification of their concept and techniques to meet the educational needs of the primary school children.
 - Adjustment of the curriculum or flexible use of syllabus has proved to be an essential feature of MGT in other countries. The need is therefore there to adjust our subject based mono-grade curriculum to MGT/MCT situation.

- Self-learning activities based on self-learning guides are essential for teaching in multi-grade situation. Self-learning method is not possible to introduce for grade one students because they are still beginning to learn. Multi-grade teacher training package prepared for 10 days recurrent training to the primary school teachers has not included grade one for multi-grade teaching except in case of one teacher school. As there is a practice of multi-grade teaching for grade one also, it is necessary to rethink about this situation in the above context.
- MGT is a practice to combine two adjoining classes in a classroom (next to each other grades) for effective delivery of instruction. But reality differs from it; hence the reality where some cases found with class settings without next to each other grades such as combination of grades – 2 and 4 or 3 and 5 etc. not the existing practice, should guide MGT methodology.
- Small school concept has been a practice in developing countries with its proper definition and identification. This concept is equally applicable in Nepal especially in sparsely populated areas with a few number of students in the schools. The class size for multi-grade teaching (combination of more than one grade) should not virtually exceed 35 students.
- Regarding teacher preparation, faculty members of the Belize Teachers' College were first provided training in MGT techniques and later they were involved in preparing the content and materials for multi-grade teaching. These materials were piloted by the supervisors in their respective MGT schools. The same materials were also converted into distance learning materials. This experience can well be utilized in the case of teachers' preparation in Nepal for MGT purpose.
- Colombia has the experience of unitary school approach which is similar to that of multi-grade teaching. The Colombian experience of in-service teacher training through three one-week workshops over a period of one year with a series of follow-up workshops to develop teacher competencies on a continuous basis seems to be an equally effective practice for Nepal. In Nepalese situation, the first phase of the training should be related to the basic concept, importance and knowledge of MGT followed by practical activities like used self-learning materials, demonstration classes, micro-teaching etc. Follow-up workshops should then be organized to provide regular feedback and support to the teachers and to address the problems of individual schools.

Chapter VI

Recommendations from the Study

Based on the findings of the study the following recommendations have been made.

- (i) Since the existing practice of the supply of teacher quotas is based on the number of students enrolled in the school, there may be a greater range of multi-grade, multi-class and mono-grade situation of instructional organization based on the number of students. As the practice of multi-class and multi-grade teaching is strongly prevailing in the schools of Nepal, a scientific mapping of such a practice is strongly needed in order to identify the exact number of schools with multi-class and multi-grade practices.
- (ii) As the multi-grade and multi-class practices are considered more as a temporary adjustment for solving the problem of the shortage of teachers, it is strongly recommended that the schools waiting for the supply of teacher quota, as per the increasing number of students' enrolment in the school should be defined as multi-class school whereas the small schools of the rural-remote area where the number of students is very low to get teacher quota should be defined multi-grade school.
- (iii) MGT/MCT has been considered by a majority of the teachers as an unwanted reality, on one hand and they are practicing it as a strategy to meet the problem of stop-gap teachers, on the other hand. It is, therefore, recommended that MGT/MCT should be treated as a necessity as well as a pedagogical choice with its reflection in the education policy of the country. Multi-class should be addressed immediately whereas multi-grade teaching should be treated as a long-term vision to make it more pedagogic in its nature.
- (iv) As the instructional and classroom setting was found differing from school to school, in relation to classroom management, class size, delivery of instruction, students participation in learning, use of MGT techniques, it is, therefore, recommended that the government should develop basic specifications for the use of multi-grade and multi-class teaching, and implement them strictly. Since multi-class teaching is the existing reality of the country, improvement in instructional strategy should be directed towards fulfilling the need of this type of instructional settings.
- (v) As variation was observed in the availability of child learning materials and the available materials were little used, these materials should reach all the schools with multi-grade and multi-class situation and appropriate training on the use of such materials should be given to the teachers.
- (vi) Teacher support materials such as TG were not commonly and fully available in the schools, on one hand and the available support materials were not used properly. It is, therefore, recommended that teacher support materials such as TG should be developed adequately, they should be made available in all the schools in the required number and how to properly use them should be taught to the teachers.
- (vii) As the MGT training proved to be inadequate, on one hand and poor knowledge-base of the MGT trainers resulted in poor delivery of training with a little transfer of MGT techniques into the classroom, the basic

training package (2.5 months package for inservice and 5 months package for preservice teachers) should include the MGT contents in adequate quantity and the trainers should be provided with essential and adequate exposure and training in MGT. The basic requirements of multi-class teaching situation should be explored and adequate contents should be developed to address the needs of the teachers teaching in multi-class situation.

- (viii) To make the MGT training demand-driven and need-based, coverage, intensity, and duration of MGT recurrent training should be duly addressed by making it more adaptable and flexible in its contents and instructional strategy.
- (ix) The contents of the teacher training packages should be so selected and arranged that they should meet the need of both multi-grade and multi-class situation of the schools located especially in the rural remote areas of the country.
- (x) As COPE schools are found better performing in areas such as classroom management, continuous assessment of the students, regular monitoring, feedback and reporting, sharing of students' progress with the parents, use of instructional materials and participatory and activity-based instructional strategy, these techniques need to be transferred to the public schools and the schools with success stories should be widely brought into public notice for their replication.
- (xi) A strong monitoring, evaluation and feedback mechanism should be established in the district and school level in order to help and support the teacher for effective use of multi-grade and multi-class teaching techniques in their classrooms.
- (xii) As existing primary level curriculum is more subjects based and grade oriented, a provision should be made for curricular adjustment in order to allow the teachers to organize and adjust instruction in multi-grade and multi-class settings. Curricular adjustment should be supported by TGs and other support materials provided to the teachers.
- (xiii) To accommodate multiple abilities of students at multi-levels or multi-grades, curricular flexibility should be there to help adjust instruction to the levels and abilities of the students in MGT/ MCT settings.
- (xiv) The teachers who are working in MGT/MCT setting should be provided with more encouragement, material support and training inputs in order to help them develop a positive attitude toward teaching in multi-grade and multi-class situations.

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Annex – A
Name of the Sample Schools

District	School code	Name of the school (VDC)
Rupandehi	1.	Semari PS, Semari (Kamhariya)
	2.	Ram Janakaki PS, Khunsara (Padsari)
	3.	Karidaha PS, Karidaha (Aama)
	4.	Ganesh PS, Paisiya (Aama)
	5.	Amari PS, Amari (Lumbini)
Dhading	6.	Kuwapani devi PS, Khatrithok (Naubise)
	7.	Janakalyan PS, Thakre (Thakre)
	8.	Balkumari PS, Bhaltar (Baireni)
	9.	Nava Durga PS, Pool-Bagaicha (Syamkosi)
	10.	Golma Rani PS, Parewater (Kumpur)
Rasuwa	11.	Grang PS, Grang (Ramche)
	12.	Bhimali PS, Bhimali (Dhunchhe)
	13.	Palep PS, Palep (Ramche)
	14.	Bhimsen PS, Thulo-Varkhu (Syaphru)
	15.	Komin PS, Komin (Syaphru)
Kapilvastu	Cope 1	Saraswoti PS, Laxmanpur (Mahuwa)
	Cope 2	Saraswoti PS, Akabarpur (Sauraha)

Annex B
Sample of the study

Districts	No. of schools	Teachers N = 19		Headteacher s N = 8		Classroom setting		FGD participants	PGD participants	FGD, Participants central level
		Trained (MGT/RT)	Untrained	Trained MGT/RT	Untrained	one room	separate room			
Rupandehi	5	4	2	1	1	8	-	12	-	
Dhading	5	2	5	2	1	2	8	20	RT (MGT) participants	Package writers (9) trainers (.....)
Rasuwa	5	1	5	-	3	6	3	15	P1 training participants	
Total	15	7	12	3	5	16	11	47	36	

Annex C₁
Tribhuvan University
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Multi-grade teaching

School Survey Form

Date

Name of school:
 Address: District VDC/Municipality
 Ward No: Village
 School establishment date: Beginning date of multi-grade teaching:.....

1. Teacher's profile:

S.N.	Teacher's name	Academic qualification	Training				Experience		Remarks Type
			Multi-grade		Other		Teaching	Mult-grade	
			Type	Duration	Type	Duration			
1									
2									
3									
4									
5									

Details of student number (2060)

Sex	Student number									
	According to admission register					Day of observation				
	1	2	3	4	5	1	2	3	4	5
Boys										
Girls										
Total										

3. School's physical condition

Details	Class					Remarks
	1	2	3	4	5	
1 Provision of seating arrangement (mat, desk)						
2 Teacher's accessibility inside the classroom						
3 Adequacy of place for classroom activities						
4 Display of wall poster, chart, picture etc. Y/N If yes useful/ unuseful						
5 Blackboard's accessibility for students						
6 System of keeping teaching material inside the classroom						
7 Which classes have multi-grade teaching ?						
8 Section in any class (Yes/No)						

4. Number of rooms, size, and purpose/utility

Utility/ purpose of room	Shape (Length x breadth) ft.	Remarks adequate/ inadequate useful/unuseful
1.		
2.		
3.		
4.		
5.		

5. Overall physical condition of the school (checklist)

1. Provision of fencing or compound wall: Yes No
 Partial number of students
2. Playground as per the Adequate Inadequate
3. Size of the desk – bench as per the students’ age Yes No
4. Comfortable sitting of students Yes No
5. School building Yes No
6. Flooring Cemented Mud
7. Annul work plan Yes No
8. Time table (Collect a piece) Yes No
6. What types of record are kept in school?
 1. Attendance record 2. Admission record
 3. Other educational record 4. None
 a.....
 b.
 c.

7. Available teaching material in school

	Types of teaching material	Teacher made	Student made	Bought	Got on donation
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					

Annex C₂

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Formative Research Project

Multi-grade Teaching

Class Observation Form

Date.....

1. Name of school:.....
2. Teacher's Name:.....
3. Class Period:.....
4. Duration of a period:minute
5. Present Student Number and Subject Taught

Class	Details			Subjects Taught
	Boys	Girls	Total	
1.				
2.				
3.				
4.				
5.				

6. Teacher/student activity chart

Time of teacher's entry into the classroom

Duration From...To...	Shift	a. Activities		Remarks (To include class, group, and even individual teaching)
		Teacher	Student	
	First			
	Second			
	First			
	Second			
	First			
	Second			
	First			
	Second			

7. If groups are formed on what basis they are?
 1.Age () 2.Ability () 3. Class wise ()
 4.Sex () 5.Others
8. Students' seating arrangement in the classroom
 1. Parallel 2. U-shaped 3. Group
 4. Circle 5. Others
9. The physical condition of the observed class.
 10.

	Yes	No	Remarks
1. Classroom sanitation			
2. Provision of light and fresh air			
3. Adequacy of desk/bench			
4. Appropriate desk/bench as per students' age			
5. Adequate classroom space for group activities			
6. Provision of self-study materials in the classroom			
7. Provision of keeping teaching material			
8. Dust-bin			
9. Provision of activities movement in the classroom			

10. Teacher's preparation:

a. Lesson plan

1. Written lesson plan () 2. Short notes ()
 3. Prepared but not written () 4. Lack of preparation

Remarks:

b. Use of educational material for teaching.

Teaching material	No	b. Yes					Remarks
		<i>Very good</i>	Good	Average	Bad	Very bad	
Use of blackboard							
Use of text book							
Use of references							
Other materials							

C. Management of multi-grade/multi-class teaching

1. 2 classes in one single room (classand)
2. 2 classes in different rooms (class.....and)
3. 3 classes in a single room (class,and)
4. 3 classes in different rooms (class...and....)
5. Others

Remarks:

11. Multi-grade teaching technique

12. Evaluation Of Teaching Activities

Activities	Undone	Done				
		Very good	Good	Average	Poor	Very poor
1. Review of lesson						
2. Presentation						
3. Classroom activities						
4. Motivation to learning						
5. Checking classwork						
6. Checking homework						
7. Students' evaluation						

13. Overall evaluation of teacher's teaching learning activities

1. How was class started?
2. How was student-learning activities managed?
3. What & how class monitor was instructed?
4. What kind of extra-curricular activities were done?
5. How did teacher use reference material?
6. How were self-learning activities for students managed?

14. What role was played by the monitor in the classroom ?

- | | |
|---|--|
| 1. Classroom sanitation | 2. To maintain the dairy |
| 3. Record of students' attendance | 4. Continuity in learning activities in the absence of teacher |
| 5. Maintain discipline inside the classroom | 6. To conduct extra-curricular activities |
| 7. Others (if any) | |

Annex C₃
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Teacher / Headteachers' Interview Form

Date

Teacher/Headteacher's name:
Name of School :
Address: District: V.D.C:
Ward No. ... Village/Tole: ...

1. What do you understand by multigrade teaching and when is it appropriate to use?

2. How do you conduct the class in a teacher's absence in your school?

3. If there is the necessity of multigrade teaching in your school, are you satisfied with it?
 - 3.1 If not why?

 - 3.2 What satisfies you in your teaching or what can be other options?

 - 3.3 Is community mobilization a solution for satisfactory teaching?

 - 3.4 How have you mobilized the community for the school?

4. What type of classroom management do you think is good for multigrade teaching? (Class, group, individual)

5. What type of teaching material do you think is good for multigrade teaching?

5.1 What types of teaching/learning material do you make your students use so that they remain involved in your absence?

6. Have you taken the training of multigrade teaching? If so, how has it helped you?

7. What are the strong and weak aspects of the training of multigrade teaching?

Type of training	Strong aspects	Weak aspects
1. Primary teacher training		
2. Classroom organization and school management		
3. Recurrent training(10 days)		
4. Others		

8. Which aspect multigrade teaching should focus on?

Type of training	Aspects to be focused
1. Primary teacher training	
2. Classroom organization and school management	
3. Recurrent training	
4. Others	

9. What types of educational plan are made in your school?

9.1 Have you prepared annual work plan as well as daily time-table?

9.2 If you have prepared it explain the nature of your involvement.

10. How do you help the teachers in multigrade teaching?
(To ask the headteacher only)

11. How did you prepare the teacher for multigrade teaching? (To be asked to the headteacher only)

12. What is your relationship like with Resource Person, School Supervisor and District Education Office regarding the matter of multigrade teaching?

13. What kind of administrative problem have you faced regarding multigrade teaching? (to ask the headteacher only)

14. What kind of problems are you facing in your school to conduct multigrade teaching?

15. What suggestions do you have for effective multigrade teaching regarding the following aspects?
 1. Package
 2. Training
 3. Teaching materials
 4. Physical management
 5. Facilities for teacher
 6. Others, if any

Annex D₁

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Study on Multi-grade Teaching Guidelines for Focus Group Discussion

(District Level Trainer/Personnel)

1. Motivating factors (causes of selecting MGT)
2. Criteria and process of selection
 - Trainer
 - Trainees
3. Preparation of trainer (DTOT)
 - duration, modality,
 - Satisfaction
 - Problems and improvement
4. Scheduling of training'
 - Problems and prospects
5. Availability of package and support materials)
6. Delivery of training
 - a) Trainer's perspective
 - strengths
 - weaknesses and problems
 - suggestions for improvement
 - critical assessment of package (weightage, strengths, weaknesses, strategy, content coverage and improvement)
 - transfer of TOT
 - instruction materials
 - b) Participants' perspective
 - participation
 - regularity
 - attitudes
 - feedback from participants
7. Implementation strategy/implication of training
 - difficulties in transfer of training
 - supervision and monitoring
8. relevancy of other MGT training materials/contents

Annex D₂

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Guidelines for Focus Group Discussion

(Central Level Trainers: NCED, DOE)

- Need of M/D TOT for MGT teacher Training
- Official procedure adopted for the selection of trainers (MTOT, DTOT)
- Preparation for trainers (materials, methods, resource persons)
- Delivery of training
- (Schedule, knowledge-base, practical experience, support materials, participation of trainees, demonstration class/lesson)
- Strengths and weaknesses
- Feedback from participants
- Transfer of training
 - MTOT
 - DTOT
 - Actual classroom teaching
 - Barrier to transfer
- Monitoring and Evaluation (who does what?)
- Critical assessment of TOT manual and MGT training materials
 - Areas in need of revision: TOT manual and MGT training materials (duration, content coverage, delivery technique)
- Availability of package and support materials (self learning materials)
- Critical problems/issues related to MGT and expected solution.

Annex D₃

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Guidelines for Focus Group Discussion (Package writers)

1. Package writers

- Historical perspectives
- Official process of package writing
 - Official verification
 - Preparation before writing the package,
 - Motivating factors
 - Availability of guidelines for developing the package.
 - Study other related package
 - Knowledge of MGT in other country
 - Experience I developing training packages
- Difficulties faced during development of the package
- Contents
 - Selection
 - Organization
 - Experts and team members
 - Discussion
 - Reviews
- Piloting/testing of the package
 - Improvement of the package after testing
- Feedback from
 - Trainers
 - Teachers
 - Revision of the package
 - Experts
- Writers' comments on the package
 - Adequacy
 - Appropriateness
 - Delivery modality
 - Reference/self learning materials
 - Theoretical aspects
 - Practical aspects (use of resources, instructional materials, practice teaching)
 - Strengths
 - Weaknesses
- Suggestions for improvement.
 - Classroom management
 - Delivery
 - Multi-grade teacher training practice and needs,
 - Policy perspectives
 - Others

Annex E

Global Concept of Multi-grade Teaching

To identify the concept of multi-grade teaching is as important as to understand it because of its varied use in different countries. The review of the status of MGT, classroom settings, policy perspectives, instructional strategy or techniques, teacher preparation and use of support materials is equally important to have a deeper insight into the understanding of MGT as an instructional organization. A brief review of MGT practices in the following five countries helps one to understand its application in a broader perspective.

Sri Lanka

Concept of MGT

A teaching/learning situation where a single teacher has to educate children from more than one grade or age group is, in general, called a Multi-grade teaching situation (Sibli, 2003). Multi-grade teaching in Sri Lanka is the outcome of the following factors:

- Sparse pupil population in an geographical area
- Disparity in teacher deployment
- Unwillingness of teachers to serve in remote areas
- High rate of absenteeism of teachers in a school
- Teachers attending in-service training sessions

National Institute of Education, working with UNICEF assistance has attempted to relate multi-grade teaching with multi-level teaching strategies. Abhayadma (1989), cited in Angela Little, 1995, has related multi-grade teaching in a regular situation with a teacher working in a grade. He mentioned that a single grade with multi-levels could be conceived as an instructional system operating in a multi-grade context (Little, 1995).

Status of MGT

Forty percent of the total number of schools may be categorized as small schools. Also, 1728 of the total primary schools have less than 5 teachers meaning that the number of teachers is less than the number of grades in these schools. The most recent data available suggest that some 63% of all schools, have four or less teachers (Ministry of Education and Higher Education, Sri Lanka, 1999). The situation may be that teachers were only teaching some grades and neglecting students in other grades for large portions of the school day.

According to school census 2001, 26.8% of the total number of schools in the island had less than 100 students and 40.9% less than 200 students.

Instructional Strategy

The word card strategy and the workbook strategy, even though they give very little opportunity for actual teaching, are being used for teaching in multi-grade situation. This strategy requires children to motivate themselves and work at their own pace. However, direct interaction with children is reported to be the most effective strategy of teaching. For direct teaching, classroom assistants or volunteers are also

used to reverse the work of each group during the practical stage. Differentiating teaching is also adopted with good lesson planning and flexible use of the syllabus for each grade in the subject being taught (MGT Training Manual for ISAS, 2003).

Colombia

Escuela Nueva or the new school programme

Concept of MGT

Compared with schools in urban areas, the quality of rural education has been characterized by a greater use of passive pedagogy, the use of inappropriate urban-biased curricula, lack of educational materials, rigidity of calendar, and a lack of community involvement. Realizing this, Colombian government decreased the entire school system of one-teacher school in sparsely populated rural areas in 1967. The New School Programme, Escuela Nueva, was organized in 1975 in an attempt to address the problems of rural education which persisted in spite of the unitary school approach.

The 'traditional' schools are described as mono-grade following a national curricula, providing no special attention to slow learners and not stimulating the students through special materials (cited in Little, 1995).

Instructional Strategy

Student self-instruction, flexible promotion, learning centers and teacher training are central to the multi-grade strategy adopted in these new schools of Colombia. Self-instruction study guides are developed for children from grades 2 to 5 in four basic curriculum areas. The guides adopt a method which promotes active learning, cognitive skills discussion, group decision making and the development of application skills within the local environment. Students are promoted to the next grade of work when they have mastered the present objectives and activities. Thus the schools operate a system of "flexible promotion." Learning Activity Centers are managed in each school to complement the study guides. Students are guided to specific activities and observations. School libraries complement both the study guides and learning centers.

'Escuela Nueva' accepts multi-grade teaching as unavoidable condition in small schools of rural areas. Because of the encouragement to develop special materials and teaching methods for multi-grade teaching, the academic achievement of the students in these schools is higher than even in the urban schools.

Introduction of self-learning instead of forcing traditional frontal teaching in multi-grade reality has been the cause of better academic achievement of the students. The role of the teachers is also transferred from a lecturer to a facilitator. Thus by 1990s 'New school' was no longer just an experimental pilot project but part of the nationwide education system.

New school experience shows that self-learning method is not possible to introduce for grade one students because they are still non-literate. The learning guide for self-learning consists of several units with the inclusion of goals, basic activities, case studies, experiments and free activities. Each student follows the four activities at his/her own pace. The students, at first, individually and then in a group, are required to observe, think and write. In order to supplement self-learning through learning guide, there is a provision of school library with about 100 books, learning

corner in the four corners of the classroom and purpose-built desks to work with a group.

Teacher Preparation/Trainees

New school has adopted the strategy of in-service teacher training. Each teacher attends three one-week workshops over a period of one year with a series of follow-up workshops thereafter in order to get the necessary theory and skills for the 'new school'.

During the first workshop, teachers oriented to the basic concepts and methods of the programme, the purpose of involving students in the organization of the school, the use of learning centers and group work in the organization of learning, and the mobilization of community resources for the development of the school.

During the second workshop teachers study the children's materials, the study guides, and learn how to use them for multi-grade teaching and 'flexible promotion'.

The third workshop encourages the teachers to play their role is using the library as a complement to the study guides and learning centers.

- The follow-up workshops, known as local non-formal workshops, and which later are formalized into "microcentres", are organized, monthly, to "exchange ideas, analyze problems and discuss results." Demonstration schools also play an important role in the learning of the multigrade teachers. Both the micro-centers and demonstration schools maintain a horizontal training network and are regarded as a "decentralized, in-service, low cost mechanism to maintain quality in the process of going to scale.'

Zambia:

Concept of MGT

A Majority of Children attending primary schools in the urban areas complete seven years of primary education whereas in rural areas enrolment in an unguarded or incomplete school represents a terminal educational experience. Because of sparsely populated areas, the problem is essentially one of renounces and the other high cost of providing teachers to teach each grade separately. Two solutions have been adopted (Lungavangwa, 1989, cited in Little, 1995).

- (i) Biennial intake in which students enroll in grade 1 only every second year
- (ii) The second is the use of multi-grade teaching in which two or more grades are taught simultaneously.

The argument behind the establishment of multi-grade teaching would enable small schools with low enrolments in each grade to upgrade themselves to complete all the grades of primary schools without requiring additional classrooms and teachers.

It is believed that multi-grade teaching can have some positive outcomes. They are:

- It can enhance independent learning
- It encourages teachers to adopt pupil-centred approaches to teaching.
- It facilitates revision of materials covered in earlier grades

- It increases pupil interaction and contributes to the country's objective of universalizing basic education.

Teacher Preparation/Training

A formal in- and pre-service training of multi-grade teachers was initiated through teacher training college. Principal and vice-principal have some prior exposure given on multi-grade teaching in Australia. Lungwangwa mentioned some problems of multi-grade teacher training programmes as follows:

- Initially the multi-grade teacher education course had not been well integrated into the mainstream programme for teacher preparation.
- Multi-grade training has got the status of extra-curricular activity that used to occur during the last few days before teaching practice commences.
- Because of its/or lack of formal status, students do not take it seriously. It is considered to be a preparation to teach in the remotest parts of the country which they would like to avoid.
- Lecturers of the multi-grade programme feel 'overstretched' because their teaching load is already full. Absence of special remuneration and formal training in multi-grade affects their recognition and status.
- Scarcity of the resources had badly affected the multi-grade teaching practice of the trainees.

Teachers of the pilot school felt a need for more in-service training in multi-grade teaching even though they were given two weeks multi-grade training. They stated that multi-grade training should be introduced in pre-service training.

Peru

Concept of MGT:

Indigenous schools, the one teacher and two teacher schools in rural areas, have multi-grade teaching situation in Peru.

Peruvian educational literature has very infrequently the reference to multi-grade teaching and multi-grade schools. The terms one-teacher schools and multi-teacher schools are in common, rather than multi-grade teaching as opposed to mono-grade teaching. In rural areas, multi-grade teaching is the norm for most schools, be they multi-teacher schools or one-teacher schools.

Key issues

- (i) *Absence of teacher training*: In most of the rural region, one-teacher schools are staffed by local teachers who have only some years of primary schooling plus a few summer vacation courses.
- (ii) *A lack of resources*: poorly equipped rural multi-grade schools, and non-existence of even textbooks and other educational materials in some schools pose serious constraints for the multi-grade teachers.
- (iii) *cultural and linguistic diversity*: There is a high cultural and linguistic diversity in both the Amazon and Andean regions where teachers have to teach mono-cultural and monolingual Spanish curriculum to indigenous children. This diversity has created considerable variation in ability within each grade.

Teacher training

- Teacher training colleges do not show concern for training new teachers to cope with multi-grade classes. They produce trained teachers mainly for urban one teacher per grade schools. The rural, indigenous one teacher schools, the least prestigious schools, do not have teachers with training and many such schools find it difficult to get even untrained teachers.

Because of growing concern for improving the quality of primary school education, government has made an attempt to offer training courses for indigenous teachers in intercultural bilingual education. But the training does not encourage the development of new styles of pedagogy and classroom organization which would enhance the task of the multi-grade teacher.

Status of MGT

Of the total multi-grade schools of Peru, 96% are located in rural areas. The total rural teaching force (69%) is involved in teaching rural primary schools with multi-grade classrooms.

Problems: (Ames, N.D.)

- The schools have severe deficiencies in infrastructure, access to services, availability of classroom furniture, equipment and materials for teaching and educational support.
- The teacher live in a precarious, pitiable condition with few incentives, scarce support and attention from high up offices.
- Formal teacher training does not instruct teachers in multi-grade methodology.
- Teachers do not speak students' language.

Belize

Concept of MGT

Belize, a small country in Central America, has a unique education system where there is a partnership between the government and the various religious bodies. Belize has eight years of primary education divided into three divisions as:

- lower division - infant 1 or kindergarten infant 2 standard one
- middle division - standards 2 and 3
- upper division - standards 4,5 and 6

Most multi-grade schools combine classes by division. This combination is dependent on the number of teachers available and their experience and academic qualification. The multi-grade situation has received very little or no attention. Teachers had to rely on their own initiative through their own experiences and activities. They seek advice from older colleagues who have had similar experiences. A study conducted by Nielsen et.al. (cited in Wright, 19.. ..) found that teachers used common subject teaching for mathematics and language Arts and subject grouping for secondary subjects like Science and Social Studies. The most common approach to common subject was the teacher working with one class while the other classes were given seatwork. Peer tutoring was used to assist the teachers (about 54% of the

teachers, in their teaching). Three major reasons for the use of multi-grade teaching in Belize are:

- church state partnership
- scarcity of teaching resources
- failure to attract trained teachers.

Status

A 1993 research on multi-grade teaching revealed that 35.3 percent of the schools were fully multi-grade.

Teacher training

The first multi-grade teaching research done in Belize suggested that teachers in multi-grade teaching assignments were seriously deficient both in content and teaching strategies and also in the approaches to multi-grade teaching. Many teachers were relying on trial and error/or on their colleagues for assistance in multi-grade teaching.

Steps taken in providing training for multi-grade teaching by Belize Teachers' college are:

1. Training was provided to the faculty members in multi-grade teaching.
2. Some faculty members participated in writing the content of multi-grade teaching materials.
3. The first draft of these materials was used by the supervisors to conduct workshops to Principals and teachers in multi-grade schools.
4. These materials were also used to provide training to the Principals in a certificate programme for educational administration at the primary school level.
5. The content of the multi-grade training modules were corrected into distance learning materials.
6. A unit on multi-grade teaching was included in classroom organization and Management Course expanding it from 45 hours to 60 hours to offer this training through a distance learning mode rather than the face-to-face mode.

Annex F
Status of MGT in Sample Districts

Number of grades in school	Number of Schools							
	Rasuwa N=78		Dhading N=434		Rupandehi N=218		Total N=730	
	With MGT	Without MGT	With MGT	Without MGT	With MGT	Without MGT	With MGT	Without MGT
1	-	3(100)	-	9(100)	-	1(100)	-	13(100)
1-2	-	-	27(69.2)	12(30.8)	10(90.9)	1(9.1)	37(74.0)	13(26.0)
1-3	20(45.2)	1(4.8)	124(81.1)	29(18.9)	18(56.3)	14(43.7)	162(78.6)	44(21.4)
1-4	14(93.3)	1(6.3)	27(93.1)	2(6.9)	11(57.9)	8(42.1)	52(82.5)	11(17.5)
1-5	30(76.9)	9(23.1)	176(86.3)	28(13.7)	77(49.7)	78(50.3)	283(71.1)	115(28.9)
Total	64(82.1)	14(17.9)	354(81.6)	80(18.4)	116(53.2)	102(46.8)	534(73.2)	196(26.8)

Source: Concerned DEOs

Note: The figures within parenthesis indicate the percentage.

Annex G
Adequacy of Classroom size based on the number of students

Schools Code no.	Class	No of stud.	Area of room Sq.ft.	Occupied area per student	Required area	Remarks	
Rupandehi	1	1	110	-	893.2	No room	
		2	65	156	2.4		
		3	45	156	3.47		
		4+5+off.	23+27	156	3.12		
		Total	273	468	1.71		2216.76
	2	1+office	39	270	14.4	316.68	
		2+3+store	31+22	270	5.9	430.36	
		4	14	-	-	113.68	
		Total	106	540	5.9	860.72	
	3	1	68	220	3.24	552.16	
		2+3+office	22+16	350	1.32	308.56	
		4+5+store	32+26	350	6.03	470.96	
		Total	164	920	5.61	1331.68	
	4	1+off.	36	212.5	5.89	292.32	
		2+3	17+11	212.5	7.57	227.36	
		Total	54	425		438248	
	5	Office	176	400 sq.ft			This is a single room school and the room is occupied by the office.
		1					
		2					
		3					
4							
5							

Schools Code no. & District	Class	No of stud.	Area of room Sq.ft.	Occupied area per student	Required area	Remarks
Dhading	6	1	26	168.8	6.49	211.1
		2	34	187.5	5.51	276.1
		3	30	155.3	5.18	243.6
		4	23	150.0	6.52	186.8
		5	20	141.8	7.09	162.4
		Office		85.6		

	Total	133	803	6.04	1079.96	
7	1	21	156.0	7.43	170.5	
	2+office	20	144.0	7.20	162.4	
	3	17	156.0	9.18	138.1	
	4	16	156.0	9.75	129.9	
	5	16	192.0	12.00	129.9	
	Total	90	804	8.93	730.8	
8	1	51	100	1.96	414.12	
	2	51	100	1.96	414.12	
	3	35	100	2.86	284.20	
	4	38	100	2.63	308.56	
	5	29	100	3.45	235.48	
	Office	-	120	-	-	
	Total	204	620	3.04	1656.48	
9	1	32	324.0	10.13	259.8	
	2	18	270.0	15.00	146.2	
	3	13	96.0	7.38	105.6	
	4+office	16	270.0	16.88	129.9	
	Total	79	960	12.15	641.48	
10	1	31	100	3.23	251.7	
	2	21	100	4.17	195.9	
	3+4	15+14	100	3.45	235.5	
	Office	-	130			
	Total	84	430	3.57	682.08	

Schools Code no.	Class	No of stud.	Area of room Sq.ft.	Occupied area per student	Required area	Remarks	
Rasuwa	11	1	41	120	2.93	332.42	
		2	8	180	22.5	64.96	
		3	8	120	15.0	64.96	
		4+office	3	120	40.0	24.36	
		5	9	120	13.3	73.08	
		Total	69	660	9.56	560.28	
	12	1	21	-	-	170.52	No room
		2	15	120	8.0	121.8	
		3+office	4	120	30.0	32.48	
		4	8	120	15.0	64.96	
		Total	48	360	7.5	389.76	
	13	1	20	186.9	9.35		
		2+3	15+4	151.8	7.99	162.4	
		4+5	6+7	151.8	11.68	154.3	
		Office	-	132.3		105.6	
		Total	52	522.8	11.48	422.24	
	14	1	65	157.5	2.42	527.8	
		2	37	132.0	3.57	300.4	
		3	17	132.0	7.76	138.0	
		4	14	137.5	7.54	154.3	
5		7	137.5	14.64	56.8		
Office		-	100	-	-		
Total		145	796.5	5.50	1177.4		
15		1	34	156	4.0	316.7	
	2	17	156	9.18	138.0		
	3	10	156	15.6	81.2		
	4	10	156	15.6	81.2		
	Office		200				
	Store		156				
	Total	76	980	8.21	617.12		

Note: According to existing educational Regulation (7th Amendment), required area of classroom for primary grades is fixed at 0.75 sq. meter (8.12 sq. ft.) per student.

Annex H
Students' and Teachers' Profile of the Sample Schools

Sc. Code & District		Grades						Teachers											
		1	2	3	4	5	Total	HT			T1			T2			T3		
								Qua	Exp. Mgt	Training	Qua	Exp. Mgt	Training	Qua	Exp. Mgt	Training	Qua	Exp. Mgt	Training
RUPENDEHI	1	110 (78)	65 (22)	45 (26)	23 (13)	27 (14)	273 (153)	I.A	4	P ₄ ,HTT	I. Com	8	P ₄	I.A.	4	P ₄	-	-	-
	2	39 (22)	31 (17)	22 (16)	14 (12)	-	106 (67)	I.A	6	P ₁	I. Ed	2	-	SLC	6 mon	-	-	-	-
	3	68 (34)	22 (13)	16 (10)	32 (18)	26 (9)	164 (84)	I.A	1	RT, P ₁	I. Sc	1	RT, P ₁	SLC	1	RT, P ₃	-	-	-
	4	36 (13)	17 (3)	11 (3)	-	-	54 (19)	SLC	6	RT P ₄	SLC	6	RT, P ₁	-	-	-	-	-	-
	5	83 (47)	32 (7)	32 (11)	22 (8)	7 (5)	176 (78)	I.A	1	RT	I.A	1	RTP ₃	I.A	1	RTP ₄			
Total							773 (404)												
DHADING	6	26 (4)	34 (11)	30 (9)	234(6)	20 (6)	133 (36)	SLC	12	RT,CD	SLC	7	RT,CD	SLC	5	-	SLC	7	-
	7	21 (17)	20 (14)	17 (13)	16 (10)	16 (9)	90 (63)	I.A	4	PICD	SLC	4	RT	SLC	3	-	-	-	-
	8	51 (32)	51 (43)	35 (26)	38 (32)	29 (26)	204 (159)	SLC	18	RT,P ₂	IA	9	RT	SLC	6	-	-	-	-
	9	32 (22)	18 (15)	13 (13)	16 (9)	-	79 (59)	SLC	8	CD, HTT	SLC	7	-	SLC	2 mon	-	-	-	-
	10	31 (22)	24 (16)	15 (13)	14 (14)	-	84 (65)	BE.d.	6	RT,CD	I.A	17	CD,RT	SLC	6 mon	RC			
Total							590 (382)												

R A S U W A	11	41 (37)	8 (6)	8 (7)	3 (2)	9 (7)	64 (59)	SLC	25	RT	B.A	6	CDP ₁	SLC	8	-	-	-	-
	12	21 (21)	15 (15)	4 (4)	8 (8)	-	48 (48)	SLC	8	HTT, P ₁	SLC	2	RT	SLC	5	P ₃	-	-	-
	13	20 (13)	15 (13)	4 (4)	6 (6)	7 (3)	52 (39)	SLC	6	HTT P ₃	SLC	13	P1	SLC	2	P ₃	-	-	-
	14	65 (58)	37 (33)	17 (14)	19 (18)	7 (6)	145 (129)	SLC	Leave 18	P ₃	SLC	2	P ₃	I.A	6	-	-	-	-
	15	34 (26)	17 (12)	10 (10)	10 (6)	-	76 (54)	BE _d	7	HTT, P ₃	SLC	7	CD	SLC	5	CD			
Total						385 (329)													

Note: Figures within parentheses indicates the number of students present at the day of observation.

RT = Recurrent Training, HTT = Head Teacher Training, CD = Curriculum Dissemination T₁ = Government quota teacher. Tp = Teacher private (school appointed teacher), P1-4 = PTT package

Annex I
Number of Self-Learning and Teacher Support Materials by Districts

S. code & District	Number of self learning materials				Teacher support materials		
	CDC developed	Prepared	Purchased	Donated	T.G.	Other	
R U P E N D E H I	1	-	2	5	-	- Partially in Maths, Mero Serophero, Mero Desh, English.	-
	2	11	2	2	-	Math class-3	Shaikshik Darpan SMC trainings package Community recurrent package
	3	10	-	1	7	- Partially in Maths, Mero Serophero, Mero Desh.	Language and math teaching in primary level specification chart
	4	8	1	-	-	-Not found	Language and math teaching in primary level specification chart
	5	9	-	2	5	-Partially I Maths, Mero Desh, Mero Serophero.	Absent
Total	38	5	10	14			
D H A D I N G	6	31	-	2	-	Partially in Math, Mero Desh and Mero Serophero	Language and math teaching in primary level
	7	27	-	-	-	Partially in Math, Physicaled and Mero Serofero.	Language and math teaching in primary level specification chart
	8	37	-	4	-	All in Math, Partial in Mero Desh, Mero Serophero, Nepali, Physical Edu.	Language and math teaching in primary level specification chart
	9	30	-	3	-	All in Mathematics; Partially in English, Mero Desh, Nepali & Serofero	Absent
	10	43	-	-	-	Partially in Math, Mero Desh, Nepali and Physical.	An approach to teaching English Primary curriculum
Total	168	0	9	0			
R A S U W A	11	5	-	3	-	Partially in Math, Mero Desh, Nepali and Physical.	Absent
	12	10	-	1	-	Not available	Primary curriculum
	13	24	-	5	-	All subjects TC were found	Language & math teaching at primary level
	14	16	-	4	-	Partially in Math, Mero Desh, Nepali and Serophero	Language & math teaching at primary level
	15	9	2	4	18	Partially in Math Mero Desh, Nepali, Physical and Serophero	Language & math teaching at primary level
Total	64	2	17	18			

Annex J
Teaching Learning scenario in MGT Classes (Rupandehi)

School	Type of teacher	Class combination	Frequency of visit	Time devoted	Teaching subject	Room setting	Teaching learning activities			
							Teacher present class			Teacher absent class
							Teacher activities	Student activities	Use of monitor	Student activities
1	T ₁ P ₄	4	3	22	Same	Same	Explain the subject matter, however student could not understand the matter Guide students to solve problems on the blackboard Gave class work (C.W.)	Did C.W. on copy Did C.W. on blackboard individually	Absent	Did class work Some st. asked to the other students.
		5	3	23						
2	HT P ₁	2	3	15	Same	Same	Solve the mathematical problems, and gave class work Guide st. to solve problems on B.B. individually Beat st. who could not solve problems	Did C.W. on B.B. individually Most of the students before passive, A punished with teacher's beating.	Absent	Some st. passive Some repeat mathematics tables
		3	3	30						
	T ₁ I.ED	2	3	16	Same	Same	Wrote topic of the lesson on the black board about construction of (sentence), however explain and taught about construction of word. Gave class work and checked.		Absent	Initial hour passive Late hour doing C.W.
		3	4	29						
3	HT RT, P ₁	4	2	25	Same	Same	Wrote lesson, subject and date on B.B. Explain the lesson, repeatedly Gave C.W. to the st.	Focused on teachers explanation, Did not ask any questions Did class work	Absent	Initially passive Did class work
		5	2	20						

	T ₁ RT, P ₁	4	3	22	Same	Same	Start lesson by memorizing previous lesson. Firstly solve numeral problems on black board, and asked to do some problems for student. Secondly, guide st. to solve problems on B.B. Check (observed) C.W.	Active participation from the beginning of class Meaningful learning Did C.W on B.B. and copy.	- Used brilliant student as a monitor to check C.W.	Did C.W. with the help of other students
		5	3	23						
4	T ₁ RT,P ₁	2	2	2	Different	Same	Teaching started with new a lesson without revision of previous class. Gave class work, ever, checked only one class C.W, the math C.W. orally! He spent only 2 minutes in grade	rade-3 st. did C.W, but not actively	Absent	- Did C.W.
		3	2	43						
5	T ₁ RT P ₃	4	3	20	Same	Same	Gave instruction far reading aloud Gave class work, but did not check Explain the lesson (Note: Teacher were found enthusiastic about MGT, and tried accordingly, however, the class room environment for MGT was not found supportive)	- did C.W.	Absent	Did C.W. Made noise Because of narrow & peace of the school ground (all classes run on ground) noisy environment found.
		5	3	25						
	T ₂ RT P _n	2	3	22	Same	Same	Started lesson with revision of previous class, Explain the lesson and asked the student to read the lesson	ead the lesson loudly	Absent	
		3	3	23						

(Dhading)

School	Type of teacher	Class combination	Frequency of visit	Time devoted	Teaching subject	Room setting	Teaching learning activities				
							Teacher present class			Teacher absent class	
							Teacher activities		Student activities	Use of monitor	Student activities
							6	HT RT, CD	3	4	23
5	4	15									
TP	3	3	10	Same	Same	- Gave the answer of questions raised by student.		Absent	Did C.W		

(Rasuwa)

School	Type of teacher	Class combination	Frequency of visit	Time devoted	Teaching subject	Room setting	Teaching learning activities				
							Teacher present class		Teacher absent class		
							Teacher activities	Student activities	Use of monitor	Student activities	
11	T ₁ (RT, P ₁)	4	3	25	Same	Same	<ul style="list-style-type: none"> - Explain the lesson and asked questions to the students. - Write questions on blackboard - Gave class work and checked it - Gave Hw & Cw - Checked Cw. 	- Doing class work	Absent	<ul style="list-style-type: none"> - Reading loudly - Doing Cw. 	
		5	3	20							
	T ₂	2	3	25	Same	Same		<ul style="list-style-type: none"> - Taking attendance and went to take, care of her daughter. - Using local language taught math, giving Cw. 	- Not motivate to teaching	Absent	- Only few were Cw.
		3	2	20							
12	HT (HT, P ₁)	1	2	25	Same	Same	<ul style="list-style-type: none"> - Read the book and asked to follow - Gave Cw and checked it - Gave Hw. 		- Repeating the lesson after teacher	Absent	- Doing Cw.
		4	2	20							
	T ₁	2	2	20	Same	Same		<ul style="list-style-type: none"> - Individual teaching - Gave class work and home work - Checked Cw. 	- Doing Cw.	Absent	- Some are doing class work and some are sleeping.
		3	2	15							
13	HT (HT, P ₃)	2	3	16	Same	Same	<ul style="list-style-type: none"> - Gave (one/one example) some rules and technique to solve addition problems in grade 2 and place value problem in grade 3 and asked them to repeat it - Gave HW 		- Doing CW	Absent	- Doing CW
		3	3	19							
	T ₁ (P ₁)	4	2	20	Same	Same		<ul style="list-style-type: none"> - Taught Nepal story - Asked questions - Gave and checked CW - Gave HW 	Most of the students were passive	Absent	- Doing CW
		5	2	25							
14	T ₁ (P ₃)	4	1	37	Same	Separate	<ul style="list-style-type: none"> - Reviewed previous lesson - Checked HW, - Taught the new lesson, - Gave class work and checked it - He did not in grade 5. 		Doing CW	Absent	Absent
		5	0	0							
	T ₂ P ₁	4	4	26	Same	Se		<ul style="list-style-type: none"> - Taught lesson - Checked HW 	Did CW and	Absent	- Doing class work
		5	3	21							

15	HT (HTP ₃)	2	3	25	Same	Separate	<ul style="list-style-type: none"> - Review of lesson was done - Gave instruction to read & write - Asked question individually - Checked hw. - Checked and gave cw. 	Doing C.W	Absent	Doing CW work
		3	3	20						

RT = Recurrent Training, **HTT**= Head Teacher Training, **CD** = Curriculum dissemination
Tp = Teacher private (school appointed teacher), **PI-4**= PTT package **T₁** = Government quota teacher.

Annex L
Transfer of Training and Assessment of the Training Package

School Code & District	Transfer of training In Class room	Assessment of training package		
		Strength	Weakness	
R U P E N D E H I	1	- MGT training absent	-	-
	2	Very poor (No MGT training)	-	-
	3	Good	- To control class - Time management	- Lack of microteaching practice. - Preparation of instructional material
	4	Poor	- Organize two classes in one room	Poor focus on teaching material
	5	Average	- Class management	- No demonstration class - Bad microteachings
D H A D I N G	6	Poor	Time management	Short duration training allowance Rs 63 is insufficient.
	7	Average	- Time management - To use monitor - Planning instruction	Trainer came late in the training
	8	Poor	- - Running training in vacation	- Short duration - No monitoring
	9	Average	- - Time management	- Short duration, less discussion, more theoretical class
	10	Average	- Make time table - Class management - Able to teach three classes at a time in one class room - To construct instruction material - To construct timetable and use of monitor.	- Training was completed in 9 days. - Micro teaching was boring - Some participants came at 1 P.M.
R A S U W A	11	No training	-	-
	12	No training	-	-
	13	Average	- Time management	- Lack of demonstration class
	14	No training	-	-
	15	B.Ed & P ₁₋₄ but not MGT	-	-

Annex M₁

FGD of Rupendehi District Level Multi-grade Teacher-Trainers:

Date: March 8, 2003

Venue: District Education Office

Context

Focus Groups Discussion in Rupendehi district was organized in order to explore the existing scenario of multi-grade teaching and multi-grade teacher training along with delivery and transfer of training. The discussion was conducted on the predetermined themes by the use of discussion guidelines. Responses of the district level trainers are organized and presented in the following points:

Classroom Management

- Running multi-grade teaching is conducive in separate classrooms rather running it in a single classroom.
- One room multi-grade teaching has the benefit that students work in the presence of teacher
- Appointing monitor would be helpful for effective classroom management.
- Multi-grade training was conducted for imparting theoretical knowledge but adequate emphasis was not given to classroom management
- The training package was used as a self learning material for the teachers
- Multi-grade teaching should be managed to suit the school environment
- Appropriate number of students in one multi-grade classroom was suggested to be around 25.

Multi-grade Teacher Training

- Only 20 percent of the training inputs provided to the teachers was being used in the multi-grade classroom
- Lack of instructional materials, unconducive school environment, teacher's unsupportive attitude were the major causes for ineffective transfer of training inputs in the classroom
- Attitude of both the teacher and trainer (Garne and Garaune) should be positive for effective transfer and delivery of training
- Teachers' preparation and their readiness towards teaching were expressed as the most important aspects for effective utilization of knowledge and skills learnt in the training
- Teacher suggested appointing a focal person in order to take overall responsibility of multi-grade teaching in the district

Instructional Materials

- Self-learning materials developed by Curriculum Development Center (CDC) were made available in every primary school. Similarly, some other

instructional materials and teacher support materials were also made available in the schools to some extent. However, their use was reported minimal

- Teachers did not prefer using instructional materials in their classes.
- Teachers need to purchase minimal or very few instructional materials if they could use local resources. Teachers complaint, according to trainers, was that they were over loaded so that preparing, collecting and using instructional materials became difficult.

Training Package

- Recurrent training package on multi-grade teaching gives more emphasis to theoretical rather than practical aspects
- Lessons one to seven are more theoretical than practical. Lessons eight to ten are practical that need to be expanded for seven days introducing more micro-teaching lessons and real classroom teaching in the school.

Monitoring of the Training

- School supervision made by district level personnel (supervisors, resource persons), was more formal and administrative which was not useful for improving classroom teaching
- Monitoring of the training was reported minimal

Others

- There was no unity of command regarding instructional improvement in primary schools in the sense that different instructions had visualized problems differently and they gave emphasis accordingly. For example, CDC is worried about implementation of T./G.; DOE and NCED are worried about recurrent training and package training respectively. Research institutions gave emphasis to their finding; District Education. Office, Resource Centers and even schools were found confused in prioritizing the educational activities
- Professional growth of the teachers and MOES personnel would help improve the teaching learning activities in multi-grade environment
- Creating a competitive environment within and among schools, RCs and district regarding instructional improvement in multi-grade class would be a proper solution to multi-grade teaching problems
- Teacher's attitudinal change and parental involvement are also necessary conditions for the improvement of classroom situation for multi-grade teaching. However, any additional incentive is desirable for teachers' active involvement in multi-grade teaching

Conclusion

Participants of the FGD did not make indepth comment on the issues of MGT in the schools as well as on the contents of the MGT training package (recurrent and others). The practice of multi-grade teaching in the schools was found unwillingly

acceptable strategy only because of difficult circumstances created by insufficient number of teachers in the schools. Almost all participants expressed the view that lack of teachers' positive attitude towards MGT was the major cause of inefficient delivery of instruction in multi-grade classrooms. Some of them also claimed that since mutli-grade teachers are doing a challenging job, i.e., additional labour in planning and managing extra classes, their work should be recognized as something special compared to monograde teachers. The participants, therefore, suggested as follows:

- Additional incentives should be provided to multi-grade teachers
- A focal person in the district should be appointed so that he/she would be made a responsible person for all the activities of MGT activities in the district
- Duration of micro-teaching should be increased to make all participants involved in it and the provision of real classroom teaching should be included in the package to provide adequate practice in managing and practicing multi-grade teaching strategy in real classroom context.

List of Participants

<i>S.N. Participants</i>	<i>Designation</i>
1. Mr. Bishnu Prasad Sharma	DEO
2. Mr. Surendra Raj Parajuli	Trainer
3. Mr. Shaligram Poudyal	Trainer
4. Mr. Diwakar Bhandari	Trainer
5. Ms. Kopila Sapkota	Trainer
6. Mr. Suresh Raj Lamsal	Trainer
7. Mr. Govind Prasad Karakheti	Trainer
8. Mr. Thaneshwor Gyawali	Trainer
9. Mr. Baburam Poudyal	Trainer
10. Mr. Abdul Rahman Khan (Headteadher)	Trainer
11. Dr. Prem Narayan Aryal	Researcher
12. Mr. Bhoj Raj Kafle	Research Team Member
13. Mr. Diwash Chandra Laudari	Research Team Member

Annex M₂
FGD (District Level Education
Personnel - Rasuwa District)

Date: May 20, 2003

Venue: District Education Office, Rasuwa

Context

It was the third Focus Group Discussion organized with the district level personnel/trainers. The purpose of this discussion was to assess the multi-grade situation of the primary schools of Rasuwa district and explore the need of the training and the emphasis given by the training package other than recurrent MGT training package. There were altogether 15 participants in the discussion programme including research team members. Teachers were not with recurrent multi-grade teacher training. Headteachers of the primary schools were given orientation about preparation of time-table for multi-grade classes. A FGD guideline was used for eliciting information from the participants. Responses of the FGD participants were recorded and organized. Their responses are as follows:

Concept

Introduction of multi-grade teaching in primary schools of Rasuwa district was done because of the less number of teachers in schools than the number of grades. Trainers did not take the reference of small number of students in the schools for multi-grade teaching. According to them MGT was the need of the school until the number of teachers equated the number of classes in the school. MGT was received as a difficult and unavoidable problem for the school. One of the participants surprisingly stated that something was better than nothing (Nahunu Bhandu Kano Mama Nai Bes) in the sense that those schools having multi-grade situation were run somehow or other with a small number of teachers than needed. Other participants also agreed this statement.

Training as MGT

- The district had not initiated recurrent MGT teacher training. Headteacher's Management Training and Whole School Approach Training were organized in the district. Those training packages also had included some contents related to MGT activities. However, the contents and activities included in those packages were not sufficient to address the MGT situation. They further added that contents and activities mentioned in supervisor's and RP's training regarding MGT were also not sufficient.
- Teachers were not using their knowledge and skills learnt through the training in their classroom practice.
- Participants stated that students' achievement in multi-grade classes was lower than their achievement in subject teaching and mono-grade teaching.

Suggestions for the Improvement of MGT Training

- Participants suggested that specific criteria should be developed to differentiate MGT and non-MGT schools. It will help the policy-makers and

the educational administrators develop appropriate strategy to support the schools.

- After realizing the need of MGT teacher training, participants were in favour of running recurrent MGT teacher training to primary teachers for the next year.
- They suggested giving MGT teacher training to all the primary school Headteachers in the first phase and to other teachers in the second phase.
- Training packages, other than recurrent MGT teacher training, should also give adequate focus to the concept and techniques to be used in multi-grade classes.
- Participants argued that MGT teacher training should adapt microteaching and actual classroom teaching modality.

Conclusion

MGT teachers training was not the priority of the educational personnel of Rasuwa district. During the delivery of headteachers' training, they were taught about the preparation of daily routine (time to time). During school visits timetables of different schools were collected and analysed. It was found that they did not have clear-cut concept about preparation of time table (daily routine) for multi-grade situation. It was also supported by the participants of the discussion. The research team could not expect more information regarding MGT from the participants because they were not taking the matter of teaching learning practices in multi-grade situation seriously.

List of Participants

<i>S.N.</i>	<i>Participants</i>	<i>Designation</i>
1.	Mr. Yamuna Prasad Chaurasia	DEO
2.	Mr. Badri Prasad Aryal	Resource Person
3.	Mr. Shiva Prasad Rijal	Resource Person
4.	Mr. Dhurba Prasad Lamichhane	Resource Person
5.	Mr. Basudev Lamichhane	Resource Person
6.	Mr. Sher Bahadur Bharati	Resource Person
7.	Mr. Beg Raj Thapa	Resource Person
8.	Mr. Ram Prasad Pandey	Resource Person
9.	Mr. Manoj Kumar Gaire	Section Officer
10.	Mr. Krishna Prasad Ghimire	Technical Assistant
11.	Dr. Prem Narayan Aryal	Researcher
12.	Dr. Shiva Ram Neupane	Research Team Member
13.	Mr. Bhoj Raj Kafle	Research Team Member
14.	Mr. Dibash Chandra Laudari	Research Team Member
15.	Mrs. Shashi Aryal	Section Officer, MOES

Annex M₃

FGD (Trainees of NCED, First Package of Rasuwa District)

Date: May 20, 2003

Venue: Dhunche High School, Dhunche

Context

Training on NCED first package for inservice primary school teachers was organized at the secondary school of Dhunche, the headquarters of the district. The research team was informed about this matter and decided to interact with the trainees of the first package who were from the different parts of the districts. A discussion programme was settled to share ideas with the trainees regarding MGT situation in their schools. There were 23 teachers involved in the training. A majority of them had multi-grade situation in their schools. Some observations of the discussion are presented as follows:

Concept of MGT

All the participants argued that MGT was in practice in their schools as a result of more classes compared to the teachers. They unanimously argued "if some one is supposed to get punishment, send him/her to the school with multi-grade situation." After a short discussion they were asked about their choice between one room or separate rooms for multi-grade teaching. They could not arrive at a single conclusion. It indicates that they were in confusion about MGT.

MGT Scenario

Based on their experience, they expressed MGT scenario in their schools as follows:

- Headteacher had training about preparation of time table for multi-grade classes that was supportive for them to handle multi-grade classes to some extent..
- Headteachers' training about preparation of time table did not fulfill the need of MGT situation in the schools. They were taught about time table but they were not able to implement it in a flexible manner suitable for individual school context.
- Sometimes they used to take help of the class monitors. However, their use was only for maintaining discipline and order in the classroom. They were not used for instructional purposes.
- Some of them had received different short-term trainings upto four times. Remaining others did not have a single training.

Issues to be addressed

- Primary school textbooks are based on learning outcomes basically designed for subject teaching with different weightage for the delivery of the contents. Could the teacher manage and teach all the contents of different subjects in MGT situation?
- Government has fixed teacher's quota i.e. 2 teachers for 3 grades schools and 3 teachers for 5 grade schools. Some schools had more teachers than

supplied quotas. The others did not get as per the government rule. Is it possible for DEO to redistribute teacher quotas in a justifiable manner?

- Mixed situation was found regarding the instructional organisation single room (MGT) separate room (MCT) classes. Is it possible to convince teachers and local people/parents to put two or more grades in one classroom and guarantee the achievement of the students as equal to the minimum from teaching?

Suggestions regarding multi-grade teaching

- After discussion participants agreed on the need of teacher training for multi-grade and multi-class teachers..
- They suggested for the management of MGT or other trainings with a focus on teaching methodology.

Conclusion

Teachers were found confused regarding the concept and management of teaching in MGT situation. They were positive towards the need of training for effective teaching in the classroom. According to them, the training should focus on the methodology aspect. Distribution of teacher quotas should be proper following government policy. Curricular adjustment should be made for effective teaching in multigrade situation.

Participation in the discussion

Twenty teachers from different primary schools of Rasuwa district who were the trainees of the first package basic teacher training were the participants of the discussion programme.

Annex M₁

Delivery of Training: A Case Study of Naubise Resource Center

Observed Date 24-25 April-2003

Venue: Bhuvaneshwori Primary School, Dharke

District: Dhading

Context

This field study was conducted in Bhuvaneshwori Primary School of Dhading district pertaining to the objective of the study with regard to the teacher training programmes. The main focus of this field visit was to observe delivery of training in multi-grade teaching recurrent training, and interact with trainees and trainers of the training program. Since the main objective of the study was to analyze the teacher training programmes with regard to multi-grade teaching in Nepal, the objective of this field visit was to substantiate the report with field experience regarding delivery of multi-grade teacher training.

Activities Accomplished

- Observed delivery process of multi-grade recurrent teacher training conducted by school supervisor/trainer in Naubise Resource Center.
- Conducted Group Discussion with trainee teachers on the themes related to teacher training.
- Interviewed the trainers (one whose class was observed and the other who had recently conducted multi-grade recurrent teacher training at the other RC).

Existing scenario

- The trainer delivered the lesson of the 5th day "Construction of self learning materials", as mentioned in the training manual, on the 9th day of the training.
- Regarding the incongruency of actual classroom delivery with the schedule prescribed in the training manual, the trainer explained that the first day lesson was given two days and the training was not conducted for two days due to 'Nepal Banda'. It was also observed that the training was conducted upto the tenth day of the programme (25th April, 2003).
- Method used in the delivery of the content was lecture or one way traffic method of communication, from trainer to the trainees. The trainer revised the previous lesson (4Th. day lesson) for five minutes and introduced the new lesson.
- During the delivery of the lesson, the trainer was found active whereas the trainees were passive during the whole teaching period.
- Trainer spent two hours in delivering the general introduction of the content (Self-Learning Activities) whereas only 30 minutes time was allotted for general introduction in the training package. Activities like group work and presentation were not conducted. The trainer summed up the remaining

lessons (from 6th day to 10th day) for a period of one hour after break. As stated by the trainer, the last day (25 April) was for closing ceremony and sharing of experiences with the trainees.

- Trainer had used the work cards but their use was not appropriate to the lesson. Moreover, the trainees were confused about the term work card, they argued that work card should be word card, which was not made clear by the trainer. The use of blackboard was also not appropriate.
- Scheduling of the daily time table was for five hours including 30 minutes break. The training, therefore, would have to run from 11 a.m. to 4 p.m. which was not followed in the training programme. The training class was started from 12.30 and ended at 4.00.
- Only 11 out of 18 trainees were present at the scheduled time of starting the class i.e. 11.00 a.m. Regarding unpunctuality of the trainees, they expressed that it was due to road block on that day. They further added that punctuality was hampered by their involvement in administrative work in the school. It is indicative that the trainees were reluctant to get trainings.
- Since practical work as mentioned in the package, was not conducted during the delivery of instruction, the training was found theoretical. Trainer's response, in this regard, was that he did not conduct practical activities in the class which resulted in the completion of training before the stipulated time. Trainers also claimed that they were not trained adequately in order to deliver the training effectively by using participatory approach.
- With regard to the TOT, trainers stated that the training they received lacked sufficient practical exercise so that they could not deliver the training with adequate exercises on practical work. However, it was observed that the trainer did not initiate participatory or practical work during the delivery of training. It is indicative that trainers did not have positive attitude towards making the training more skill-oriented. Also, they might not have adequate training in this respect.
- Regarding strengths or positive aspects of the training' the trainees expressed that the skills regarding preparation of multi-grade time-table, use of monitor for classroom activities and management of teaching in a situation with less number of teachers than the number of classes were acquired through the multi-grade recurrent training.
- However, they claimed that aspects like instructional planning, demonstration lesson and micro-teaching were found weak during the training period. Both the trainers, furthermore, stated that the package could not be implemented within the prescribed period of ten days.
- Both the trainers realized the importance of drawing match-stick figures and also stated that they could not teach this item due to lack of training.
- Teachers who did not teach in primary section and the teachers who did not have multi-grade situation in their schools were also participating in the training. It is indicative that multi-grade recurrent training was not demand driven.

- Trainees stated that due to heavy work load in the schools' knowledge and skills learnt in the training could not be transferred in actual classroom situation.

Conclusion

Training schedule was not followed by the trainer in toto. It was observed that trainer was not prepared for the delivery of instruction in multi-grade class. Teacher could not manage time effectively for classroom interaction as mentioned in the training package. The trainers were found reluctant in participating in the training programme. Even though the training package has adequate provision for practical work, the trainer did not deliver the package in an interactive and practical way. Trainers also expressed that they were not provided adequate training regarding the delivery of teaching in real classroom situation. According to the trainers, the package was found difficult to implement within the prescribed period of ten days. They, moreover, expressed that the TOT they received was not adequate for effective delivery of the training. To sum, the whole focus of the training was on teaching but not on training or developing specific competencies with regard to multi-grade teaching.

Issues

1. Teacher's preparation for MGT was found both in appropriate and inadequate. They were not provided with necessary skills to teach in multigrade classes.
2. Teachers did not prefer to teach in multigrade classes, they rather wanted more to teach the subject-teaching classes.

Participation in the discussion

Sixteen primary school teachers of Naubise Resource Centre who were receiving training through the School Supervisor as a Resource Person were the participants of the discussion programme.

Annex M₅
FGD (District Level Trainers of Dhading District)

Date: May 16, 2003

Venue: District Education Office, Dhading

Context

The second Focus Group Discussion with the district level trainers was organized in Dhading. There were altogether 20 participants along with Research Team members, Executive Director of CERID and representative from monitoring unit of MOES. The discussion was organized on the Birthday of Lord Buddha for four hours starting from 7:30 to 11:30 A.M. The main objective of the discussion was to explore different aspects of delivery of Multi-grade teacher training conducted in the district.

The recurrent multi-grade teacher training was conducted a week ago in the district. It was given to all public school teachers. The discussion programme was organized after visiting five primary schools having multi-grade situation. During the visit of the above schools it was found that Dhading selected multi-grade teacher training among modular recurrent teacher trainings to be provided to the teachers. The discussion started on themes of multi-grade teacher training previously prepared for the above purpose. Information provided by the participants were recorded and organized under the following headings:

Why did the district chose MGT teacher training?

In the previously academic year, a discussion was conducted among district level educational personnel with regard to organizing recurrent training in the district. There was a great number of schools having less number of teachers than the number of grades. There were about 100 schools each with only one teacher. There was critical need of running classes in multi-grade/multi-class situation. Participants also felt that MGT teacher training could also be useful for other teachers who were working in the schools without multi-grade situation. Because of the teachers' absenteeism, multi-grade/multi-class situation had become rather a regular feature in all the schools of the district.

Strengths and weaknesses of the training

Strengths:

- The training programme was conducted after identifying its nearly in the district.
- Scheduling of the training was appropriate. Training programmes were conducted at the end of the previous academic session without disturbing the teaching of regular classes of the new academic session in the schools.
- The training programmes helped for the teachers in the following aspects:
 - Using instructional materials
 - Organizing multi-grade teaching multi-class
 - Preparing daily routine or time table
 - Organizing classroom instruction with self learning activities (SLA).
- The training programmes were conducted in respective RCs but not in the district headquarters.

Weaknesses:

- The training package was based on theoretical knowledge rather than on practical activities.
- The same training package was provided to both the trainers and trainees which is not the motto of the recurrent training. In other words, the trainers' manual was not provided to the trainers.
- The training programmes were conducted in a participatory style. Rather, they were more teaching oriented or teacher centred.
- The practice of micro-teaching could not be successful because all the trainees could not participate in it due to lack of time for all.
- Senior teachers were found little motivated in the training activities.
- Limited use of instructional materials in the training resulted in the use of chalk and talk method.

Problems of the transfer of training

- Over crowded classroom was reported as one of the major barriers in the transformation of knowledge and skills acquired in the training in classroom teaching.
- Difficulty was noticed in changing the old habits of the senior teachers who were also reluctant to activity based and participatory teaching. Such teachers could not perceive activity based teaching positively.
- Trained teachers were found upgraded to teach the upper grades. These gaps of the teachers were fulfilled by appointing new teachers from school's own resources. Thus the problem of teaching in primary grades remained unsolved.

Suggestion provided by the participants for the improvement of MGT package teacher training on multi-grade/multi-class teaching.

- Recurrent MGT teacher training package should be improved with adequate provision of interaction and group work. Eventhough the training package has mentioned about the use of group work and practical work, the delivery of the training should be based on workshop style, not as a traditional teaching style. The training package, therefore, should be developed along this modality.
- Since the package has not given adequate emphasis on the preparation and use of instructional materials, more emphasis along with the ways and techniques of preparation and use of such materials should be given.
- Other training packages lack clarity of the MGT concept and teaching-learning strategy for MGT situation. Moreover, very few weightage is given for MGT in these packages. The participants suggested that weightage should be increased for MGT with adequate clarity of its concept and activity based contents. Similarly, the concept of MCT should be defined and included with due weightage in the training packages.
- Since the trainers were also not given TOT in participatory and workshop style despite its provision about participatory teaching, care should be taken to while giving TOP to the trainers.

Issues to be addressed

- The recurrent training teacher package does not address the methodological aspects in an adequate way. How much weightage should be given to methodology in the package is not clear?
- There were many teachers appointed by SMCs and VDCs work in multi-grade situation. Without procuring government quota, these teachers would not be eligible for recurrent training. The issue therefore is the inclusion of these teachers in recurrent MGT teacher training.

Conclusion

District Education Office of the Dhading district initiated the derives of recurrent MGT training based on the actual needs of the teachers teaching in primary schools of the district. The research team visited the schools after two to three weeks of the start of the training. Overall situation of the observed classrooms depicted the fact that teachers could not manage MGT in a real sense of the term. The participants also realized this. Participants in this respect, opined that training programmes concentrated less on practical and participatory activities than the theoretical deliberation of the contents. The existing package was not delivered properly. Finally, the FGD concluded that technical support to the teachers for managing multi-grade teaching is essential and therefore pedagogical aspect of the MGT should be explored and highlighted through training programmes.

List of Participants

<i>S.N.</i>	<i>Participants</i>	<i>Designation</i>
1.	Mr. Uma Kant Mishra	DEO
2.	Mr. Harka Bd. Adhikari	School Supervisor
3.	Mr. Babu Ram Nepal	Resource Person
4.	Mr. Narayan Prasad Bhatta	Section Officer
5.	Mr. Dinesh Ghimire	School Supervisor
6.	Mr. Laxman Prasad Basyal	School Supervisor
7.	Mr. Bhaskar Raj Gautam	School Supervisor
8.	Mr. Bhupendra Kumar Shrestha	Resource Person
9.	Mr. Iswar Kumar Shrestha	Resource Person
10.	Mr. Hari Ram Burlakoti	Resource Person
11.	Mr. Hari Prasad Poudel	School Supervisor
12.	Mr. Ghanasyam Poudyal	School Supervisor
13.	Mr. Rak Raj Khakurel	School Supervisor
14.	Mr. Yog Raj Bhattarai	Section Officer
15.	Dr. Hridaya Ratna Bajracharya	Executive Director, CERID
16.	Dr. Prem Naryan Aryal	Researcher
17.	Dr. Shiva Ram Neupane	Research Team Member
18.	Mr. Bhoj Raj Sharma	Research Team Member
19.	Mr. Diwash Chandra Laudari	Research Team Member
20.	Mrs. Shashi Aryal	Section Officer, MOES

Annex M₆
FGD (Central Level Package Writers)

Date: April 18, 2003

Venue: CDC Hall Sanothimi

Context

Focus Group Discussion with Central Level Package writers was organized to assess the procedures adopted for writing the package and to identify difficulties faced during the development of the package. Recurrent multi-grade teacher training package developed by the DOE was the focus of the discussion. However other training packages that deal with MGT were also discussed. There were altogether 14 participants in the discussion programme and almost all of them were involved in writing the training package related to multi-grade teaching (Ten days recurrent MGT package and basic primary teacher training package of NCED). The discussion was guided by the themes developed by the researcher (See annex for FGD guidelines). Information provided by the respondents were recorded and presented as follows:

Emergence of Multi-grade Teaching Concept

During the initial year of the PEP, the government of Nepal had announced the target of reaching Asian Standard (Asiali Mapdanda) by fulfilling basic needs of the people. Basic and primary education was defined as one of the basic needs. To enhance access to basic education, schools (1-3 grades) were opened throughout the country with the support of one teacher each for a school by the government. This situation led the schools to have less number of teachers than the available number of classes. A similar situation was observed by UNESCO in some of the countries of Asia and Pacific region meaning that these countries also had schools with less number of teachers than the number of grades. To address this problem, UNESCO developed a guideline for running multi-grade classes. In this connection, CERID took initiation in conducting a national workshop on multi-grade teaching for related educational personnel with the assistance of UNESCO in 1988. It conducted a status study of multi-grade teaching in Nepal and prepared a handbook for teaching in a multi-grade classroom situation.

Procedure of writing MGT Package

Concerned officials of Primary Education Resource Material Development Unit of PEP (BPEP), realising the need of multi-grade classes in the country, took initiative to introduce measures to promote quality teaching in multi-grade situation. In order to address the need of multi-grade teachers, they suggested to develop learning materials (guidelines). Consequently, a twelve-day training package for MG teachers was developed. The process adopted to develop the package was as follows:

- i. Visited schools with multi-grade situation and identified the training needs of the teachers to be addressed in the package;
- ii. Formed a committee to write the package;
- iii. Developed a draft package'

- iv. Discussed about the draft package with university teachers and other concerned experts;
- v. The package was field-tested in the schools

Presently, the 12 day package has been reduced into 10 day package under the name of recurrent multi-grade teacher training package. Other training packages include only introductory notes on multi-grade teaching with varying weightage in the content. The package writers disclosed that there was no provision of resources and reference materials for developing and improving the package for multi-grade teachers. The Primary Education Resource Material Development Unit personnel themselves had initiated the writing of the package. Additional incentive was not provided to them during the development of the package.

Difficulties faced during the writing of the package

Lack of materials

Lack of related study materials and packages

- Lack of professional support from the experts working in the concerned field
- Lack of exposure to the writers in the field of multi-grade teaching
- Lack of incentive or financial support to the writers' team.

Difficulties for the delivery of the package

MGT schools have not been properly identified- unless the MGT training needs of the teachers are identified, delivery of the training becomes less effective and more superficial. Teachers will not be motivated if their training needs are not addressed and if their schools do not have multi-grade situation.

Deployment of teachers without MGT training in the schools with multi-grade classes will create problems in managing such classes effectively. Therefore, a serious policy level problem with regard to the need and delivery of MGT training to the teachers is observed.

The package was developed giving more emphasis on theoretical knowledge and practical activities. Support/instructional materials lacked significantly. This situation led to the poor delivery of the package.

Conclusion

One of the major issues on multi-grade teaching is related to the curriculum which has given a fixed weightage and teaching hours for different subjects in line with subject teaching modality. Can we adjust this subject teaching modality into multi-grade/multi-class teaching situation? Such concern will be quite critical in the development and implementation the package ensuring the transfer of knowledge and skills in real classroom situation.

Participants

List of Participants

<i>S.N.</i>	<i>Participants</i>	<i>Designation</i>
1.	Professor Basu Dev Kafle	Professor, FOE, TU
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13.	Mr. Bhoj Raj Kafle	Researcher Team Member
14.	Mr. Rom Prasad Bhattarai	

Annex M₇
Tribhuvan University
Research Centre for Educational Innovation and Development
Formative Research Project
Focus Group Discussion with Central Level Trainers

Date : 20 June 2003

Venue : CERID, Tripureshwar

Context

Focus Group Discussion with central level trainers was organized to collect information regarding need, delivery and transfer of training. The focus of the discussion was recurrent MGT teacher training practice and MGT teacher training package. Presentation of FGD guidelines was made by the researcher. Information supplied by the central level trainers were recorded and presented as follows:

Need of trainers' training

Since trainers do not have adequate knowledge-base and exposure in training it is essential for them. So far as delivery of training is concerned, a trickle down or cascade approach of training has to be adopted by the country. It is therefore, essential to train the trainers for making them research oriented and keep up with the new trend developed in this field.

Selection of trainers

There are no explicit written procedure and criteria for the selection of the trainers. However, excepting practice of selection is found to have at least B.Ed. qualification to be a trainer. In addition that, trainer should be of officer level educational personnel or secondary school teacher. At the central level, concerned personnel of the training section of Department of Education are assigned to provide TOT to the district trainers who are selected from among the School Supervisors, Resource Persons and senior high school teacher. For district level trainers' training (DTOT), either trainer are sent from center or the trainers with MTOT are assigned to provide training to the district level trainers. These district level trainers deliver all types of recurrent training including recurrent MGT training in their respective resource centers with the help of another trainer.

Delivery of training and its transfer in classroom teaching

Master trainers at the central level do not have exposure and training with respect to MGT. Since they are in the training section of DOE, they are supposed to deliver training on other words; it becomes their duty to provide training. They provide 10-day training to cover all types of recurrent training developed by DOE. The central level trainers expressed that the MGT training has developed the skills of classroom management, construction of instructional materials, plan self-learning activities, prepare class routine for MGT class. Regarding barriers to the delivery of training (MTOT or RC based training) they expressed that transfer of trainers and teachers, lack of experts in MGT, poor knowledge base of the trainers, low capacity of the teachers to grasp the intention of the training have created problems in the delivery of training. They further mentioned that unconducive classroom environment, lack of needed support mechanism from the local community and teachers' reluctance in

using knowledge and skills learnt in the training have affected the implication of the training in classroom practice.

Assessment of MGT training package

The MGT training package should address the following aspects in more detail.

- Provision of practical activities
- Construction and use of instructional materials
- Provision of self-learning activities.

There are provisions of all types of modular training in different aspects of education including MGT. These training packages have addressed different areas of competencies to be developed in the teachers. The inputs will directly or indirectly help the teachers to teach in MGT situation. Despite this reality, training packages are developed for mono-grade class situation and subject teaching structure of the curriculum, which is also reflected in MGT training package.

Conclusion

All the training programmes are based on cascade model. Specific criteria are not developed for the selection of trainers. Due to the lack of exposure to the central level trainers and lack of expertise in Nepal with respect to MGT, delivery of training is found not to be effective. Different barriers are observed in the transfer of training in classroom situation and the efforts to solve the problem are not adequate. All the packages including MGT teacher training package have the influence of mono-grade approach of teaching. The success cases of MGT schools are not highlighted for their replication in other schools.

Participants

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Annex M₈

Participants of FGD organized in Kapilvastu district

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Annex N

Suggestion for the improvement of MGT/MCT Classes

During interview and discussion, school teachers and headteachers working in multi-grade and multi-class situation gave suggestions for the improvement of MGT in the country. Their suggestions are related towards remedying the problems of MGT, on the one hand and improving teaching in MGT situation. Their suggestions are listed with their frequencies and percentage as follows. (These suggestions are for both MGT and MCT situation):

<i>Major Suggestions</i>	<i>Frequency</i>	<i>Percentage</i>
Additional incentive should be provided to the MGT teachers	14	51.85
There should be appropriate distribution of teacher quota in MGT schools.	11	40.74
Physical facilities (School building, class size, playground etc.) of the schools should be improved.	9	33.33
Teachers should construct and use concrete and semi-concrete materials for teaching in primary grades.	9	33.33
MGT should be run in one large classroom instead of breaking it into small separate rooms.	9	33.33
The MGT training package should be child-focused and activity-based	8	29.63
Teacher training should give emphasis on preparation and use of instructional materials.	7	25.93
Basic teacher training should address MGT component sufficiently.	7	25.93
Refresher training on MGT should be managed	6	22.22
Duration of MGT teacher training should be increased	6	22.22
Monitoring and supervision of MGT should be ensured through the involvement of local community	5	18.52
In the training demonstration lessons should be organised	4	14.81
The training Package should include child psychology and assessment practices	3	11.11
Administration should be cooperative to promote participatory teaching in MGT classes.	2	7.41

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