Multigrade Teaching Training in Nepal: Diversity of Practice and Impact of Training

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I. Introduction

The teacher is the most decisive factor in the qualitative improvement of primary education (Mortensen, 1992) A large number of unqualified teachers are the critical obstacles to improve the quality of education in developing courtiers (Andrews et al., 1990) Teacher training is a direct means to enhance the quality of teaching and student achievement. In-service training is one of the strategies for improving the knowledge and skills of unqualified teachers already employed (Lockheed et al, 1991) For example, a study in the Democratic Republic of Congo indicates that in-service training has improved the French reading test scores of students in Grade 8 (Biniakunu, 1982)

Although teacher training is such a key factor in the quality of education, and some positive results are available, a number of educational research and international organisations are concerned that teacher training does not result in a better quality of education (Craig et al., 1998) Presenting ready-made, highly specific training as an event is not the solution for the classroom (Fullan, 1982, Fullan and Stiegelbauer, 1991) Most of the training is 'worth no more than providing the certificate' (Dove, 1986) The quality of training in developing countries is often unsatisfactory (Stuart and Lewin, 2002) A study in Papua New Guinea showed the inefficiency of teacher training, focussing on its duration and ad-hoc structural system (Guthrie, 1983) In particular, satisfaction with in-service training is limited (Commonwealth Secretariat, 1982) For example, the quality of the in-service training of the MIITEP programme in Malawi remains low and the training programme is not successful (Kunje, 2002)

Here the government of Nepal has been providing a ten-day in-service teacher training named Multigrade Teaching Training in order to improve current practice of

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multigrade teaching. Multigrade teaching means that a type of class organisation that teachers are responsible for two or more grades simultaneously during one lesson period. In Nepal, the teacher-school ratio is 3.8 in 1998 (MOES, 2000) In other words, on average, only 3.8 teachers are available for 5 grade groups at one primary school. Thus the prevalence of multigrade teaching is quite high and the government of Nepal introduced the in-service training as one of the project components.

In the context of the education sector, however, there is no specific statement for national policies on multigrade teaching. National curriculum, textbooks, teachers' guide and classrooms are designed for monograde teaching. This is because the needs of multigrade teachers and their students have been often overlooked by education policy makers under the predominance of monograde teaching (Little, 2001). Multigrade classes in developing countries often have a poor image because they are under-endowed with resources (Brunswic and Valerien, 2004) Multigrade teachers are often unsupported and not prepared to teach in multigrade classrooms (Rowley and Nelson, 1997). Moreover, teachers often express a negative perception on multigrade teaching and face their practice pessimistically (Lally, 1995; Little, 2001; Berry, 2001) Consequently multigrade teachers struggle to teach in the gap between their own multigrade reality and the universal monograde norm - not knowing what to do. They organise multigrade teaching their own ways (Wright, 2000) As a result, practice of multigrade teaching in classrooms differs widely from classroom to classroom.

This Multigrade Teaching Training has been developed by the central government and one single model of the training is provided nationwide. However, considering the diversity of practice of multigrade teaching under such unsupported circumstances, is the single model of the training touch upon the various problems in current practice which could be widely different from classrooms to classrooms?

Out of this question, this paper tries to measure the impact of Multigrade Teaching Training in selected multigrade classrooms. The paper initially reviews the theories on training and change. Then it describes the diversity of practice in multigrade classrooms through a rigorous research conducted in Nuwakot and Kavre districts in Nepal. After that, it explores how the diversity of classroom practice affects the impact of in-service teacher training. Finally, it argues the importance of considering the

context of the recipients in providing teacher training alongside the theoretical framework.

II. Training and Change

Several researchers have been concerned with explaining mainly two models of training and change in quality of education. The first model puts the emphasis on 'providers and their inputs.' It argues that training can make a change, when the training is rationally justified by scientific research or good dissemination methods (Chin and Benne, 1969; Havelock, 1969; Havelock and Humbert, 1977; Hurst, 1983; Lewin, 1991) When training is developed by specialists with knowledge proved by scientific research within the wider social systems, the training is rationally justified by the recipients. Additionally, when training is well diffused through good communication media, the training can reach classroom practice.

The second model puts the emphasis on 'recipients.' It insists that change occurs when teachers attempt to use a new element introduced through training (Fullan, 1982) The foremost concern of the model is the spontaneous needs of the recipients and conditions at the practice level - schools and classrooms (Chin and Benne, 1969; Fullan, 1985; Havelock, 1969; Hurst, 1983; Lewin, 1991). Training should be implemented through 'need sensing, diagnosis and formulation of the need as a problem to be solved, identification and search for resources relevant to the problem, retrieval of potentially feasible solutions, translation of the knowledge into specific solutions, and behavioural try-out or application '(Havelock, 1969: 11-11) The training is meaningless unless teachers' needs and circumstances are considered as a prior fact (Havelock, 1969)

Fullan (1982) analyses that teacher training fails to achieve its purpose because the implementation of training tends to overlook 'recipients' (teachers) in favour of 'providers' inputs' (training curriculum, materials and so on) Even if there is an ideal of good training, it is not meaningful unless teachers adopt its components into their classrooms. Training may be able to convey certain relevant kinds of knowledge to the teachers, but such a providing role is only a part of a problem-solving process (Havelock, 1969) The teachers must have self-initiative for the innovation to succeed.

One of the reasons why trainee-teachers do not adopt the training components is

that training often does not take into account the real world context where teachers work (Fullan and Hargreaves, 1992). In their own teaching-learning context, 'teachers frequently do not see the need for a change that is being advocated, and are not clear about what they ought to do differently in their classroom.' Furthermore, 'any given change may not needed or valued in some situation. Even when there is a potential need, as when teachers want to improve some area of the curriculum, the change may be presented in such a way that it is not an obvious solution '(Fullan, 1982: 250)

In Multigrade Teaching Training in Nepal, how does the training take into account the real world context where teachers work and how do teachers react toward the training in their classrooms after the training? In order to answer these questions, a field research was held in two districts in Nepal.

III. Research Methods

The case study research was conducted in Nuwakot and Kavre districts. Both districts are located near Kathmandu valley. Despite their advantaged location, 94.66% of primary schools in Nuwakot district (2000) and 84.71% of primary schools in Kavre district (2001) are multigrade schools (calculated from District Education Office (DEO) Nuwakot, 2000a, 2000b; DEO Kavre, 2001) All of the 108 primary teachers in the targeted areas were called for Multigrade Teaching Training for ten days. Out of the targeted 108 teachers, 98 teachers attended the training.

In order to evaluate the training and study the relation between the training and change, 'inputs of providers' and 'real context of recipients' were examined. About 'inputs of providers' the national training developers were interviewed in Kathmandu to understand how the training was developed. At the same time, the national training curriculum was studied.

About 'real context of recipients' classroom practice of multigrade teachers was studied. Initially 14 primary multigrade schools in the two districts were visited and interviewed all of the 14 headmasters/headmistresses and 33 teachers to grasp overall condition of multigrade schools. Among these schools, 5 schools were selected and their classrooms were observed for a subsequent week at each school to understand classroom practice of multigrade teachers. Through interviews and classroom

observation, five different patterns of multigrade teaching were identified. These patterns were confirmed by the data from interviews with 33 teachers and a questionnaire completed by 108 primary school teachers in the target areas. The five patterns were analysed in the basis of teacher's responsibility for multigrade classes and they were formed as the ladder of multigrade teaching (Figure 2)

In order to evaluate the impact of the training programmes, five trainee-teachers were selected among the 98 participants. Their classrooms were observed for one week each before and after the training. Their practice before and after was compared in relation to the training curriculum before and after the training. The result identified in the five classrooms was confirmed by focal group discussions with all trainers who conducted Multigrade Teaching Training in the two districts.

Their change was analysed with the ladder of multigrade teaching developed out of the five patterns of classroom practice used as the scale, in order to understand the relation between the change and the real context of teachers (Figures 3 and 5)

IV. Five Patterns of Multigrade Teaching

The observation revealed that the multigrade class organisation varies from school to school and from classroom to classroom. This paper identifies five different patterns of multigrade teaching, which ranges even more diverse than three patterns of typical practice of multigrade teaching in developing courtiers identified through available literature (Suzuki, 2008)

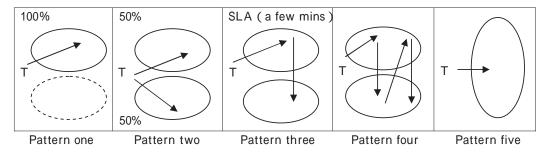


Figure 1 Five patterns of multigrade class organisation during a lesson period

The features of class organisation are shown in Figure 1. With the first pattern, teachers divide their whole teaching time during one day between the number of

grades they have to cover, and teach each grade individually. This means that schools move from a multigrade arrangement to a monograde set-up so that multigrade teaching in the school becomes invisible. With the other patterns multigrade teaching is more visible. With the second pattern, teachers divide the lesson period of a multigrade class into two equal time sections and teach each grade separately. With the third pattern, one class is considered the main class to be taught, and the other is treated as an additional class. In the additional class, teachers assign Self-Learning Activity (SLA) during the first few minutes of the period, before going to teach the main class. The teacher concentrates on teaching in the main class. With the fourth pattern, teachers visit different classrooms frequently during one period. With pattern five, there is whole class teaching; in most schools this concerns only extracurricular subjects.

The difference among the five patterns is caused by the different degrees of teachers' responsibilities for multigrade teaching. The different seating arrangement for the students and the grade combinations of multigrade teaching create different space and time boundaries for multigrade classes. These conditions determine the extent of teacher responsibility for multigrade teaching. Table 1 summarises the characteristics of the five patterns, including features of class organisation and degrees of responsibility for two or more grades simultaneously.

In pattern one, students from different grades are seated in different classrooms. The teachers divide their teaching day by the number of grades they have to cover, and teach each grade individually, one after the other. The first pattern, by dividing the teachers 'time into the number of classes they have to cover, shifts the school from a multigrade school to a monograde school. 'A multigrade class' is not identified and multigrade teaching is physically invisible. Therefore, the teachers do not realise their responsibility for two or more grades at the same time. Part of the students' time in each grade group is sacrificed, but the teachers do not realise their responsibility for the time students are idle.

In pattern two, students from different grades are seated in the same classroom. These two grades are identified by the teacher as 'a multigrade class.' The multigrade class is physically visible so that the teachers know that they have to deal with two or more grades during the same lesson period. However, they do not realise

their responsibility for two or more grades at the precisely same time. Teachers divide the lesson period of the multigrade class equally into two time sections and teach each grade group separately, as if they were teaching two monograde classes. As a result, they do not provide SLA and do not occupy the time students are idle.

In pattern three, two or more grades are treated as 'a multigrade class.' One grade is considered the 'main teaching class,' the others as 'additional classes.' The teachers recognise their simultaneous responsibilities for both grades. For the additional class they provide SLA at the beginning of the lesson period and feedback at the end. However, they fail to control the additional class, because of an inappropriate amount and quality of SLA to cover a 45-minute lesson.

		identification of	responsibility for	control of student
	the features of class	the class as a	two or more grades	time on task during
patterns		multigrade class	simultaneously	self-learning time
	sharing the time of teachers			
1	for all 5 grades			
	dividing the lesson period			
2	into two			
	using a main teaching class			
3	and an additional SLA class	$\sqrt{}$	√	
4	frequent visits	√	√	√
5	whole class teaching	√	√	√

Table 1 The characteristics and diversity of multigrade class organisation

In pattern four, the teachers also recognise their responsibility to simultaneously control 'a multigrade class.' The teachers visit two or more grades frequently during one lesson period. The grades receiving these frequent visits during a lesson period are identified as a multigrade class. The teachers realise their responsibility and provide SLA whenever they leave one grade. By visiting and checking all grades frequently, they control the student activity during SLA.

In pattern five, the grades grouped together during a lesson period are identified as 'a multigrade class.' Subjects such as sports, music and arts are taught to a whole class. The teachers in pattern five identify two or more grades as a whole class and teach them together. The teachers are responsible for the grades simultaneously. All students of the multigrade class receive direct teaching from the teacher and their activities during the lesson are controlled.

Taking into account the characteristics of the patterns and the level of the teachers' realisation of their responsibility for multigrade teaching, the five patterns of multigrade class organisation allow the construction of a ladder (Figure 2) The degree of conscious responsibility for multigrade teaching increases from pattern one to pattern five. With pattern one, the multigrade class is not identified. As a result, the teachers do not realise their responsibility for the multigrade class. With pattern two, the multigrade class is identified. However, the teachers still do not realise their responsibility for the multigrade class. The teachers following pattern three realise their responsibility, but fail to control the class taught indirectly. The teachers using pattern four realise their responsibility and they succeed in controlling the multigrade class. The teachers applying pattern five identify two or more grades as a whole class and teach them together.

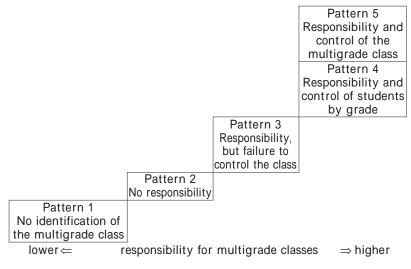


Figure 2 Ladder of multigrade teaching

The main disadvantage from monograde teaching is constraint of learning time of students, which determines quality of education (Lockheed et al., 1991) There is a significant difference in the amount of time given to each grade in different patterns. The students in the classrooms with the patterns one and two tend to receive less teaching-learning time than those in the patterns three, four and five. In order to raise learning time of students in multigrade teaching, the way of multigrade class

organization should be improved.

V. Multigrade Teaching Training

(1) Training Context

The government of Nepal has been providing several in-service teacher training. Multigrade teaching is included in the training curriculum of two types of in-service training. One is the Basic Primary Teacher Training, a ten-month in-service primary school teacher training, provided by the National Centre for Educational Development (NCED). Another is Multigrade Teaching Training, a ten-day in-service teacher training, developed by the Primary Teacher Training Unit (PTTU) This paper studies about the latter.

It is one of the components of the Basic and Primary Education Project (BPEP) BPEP was initiated in 1992, at its disposal, multi-donor funds, trying to improve access to, quality and management efficiency of primary education (MOE, 1999)¹ The project started with 19 districts and had expanded to 40 districts by the end of BPEP1. Subsequently BPEP2 expanded the project to all 75 districts of Nepal.

Multigrade Teaching Training was organised every year from 1992/93 to 1998/99 and provided to a selected group of 3,843 trainees between 1992 and 1998 (Shrestha et al., 1999). The number of trainees in Multigrade Teaching Training was 158 in 1992/93, 1,514 in 1993/94, 903 in 1994/95, 584 in 1995/96, 292 in 1996/97 and 866 in 1997/98 (BPEP, 1998) Multigrade Teaching Training did expand not only as far as the number of trainees is concerned. It also spread from the initial four pilot districts to all of the 40 districts of BPEP1. The training was conducted in the selected four districts in 1992/93, in 25 districts in 1993/94, 38 districts in 1994/95, 29 districts in 1995/96, 17 districts in 1996/97, and 40 districts in 1997/98 (BPEP, 1998)

According to the training policies specified by the government, all primary school teachers employed by the government have to take at least one training module per year. Until 1997/98, the selection of teachers for training was decided by the central government and it was also responsible for distributing training packages to the districts. The system was changed in 1998/99. Now the decision is made by the districts, based on local needs, and packages are distributed by the PTTU according to the demand from each district. In 2001, District Education Offices in Nuwakot and

Kavre districts decided to conduct Multigrade Teaching Training for all primary teachers in the selected resource centres.

(2) Training Curriculum

The training package for Multigrade Teaching Training, which includes training material for the trainees and a training handbook for the trainer, was developed by ten members of PTTU, in co-operation with foreign and Nepalese advisors (PTTU, 1998) The authors started preparing in 1994 and the package was finally published in 1998. The package has been used for Multigrade Teaching Training since 1999.

According to my interview with one of the authors, none of them had had teaching experience in a multigrade primary school. For instance, the author interviewed wrote parts of the first, second and fifth sections, the whole third section and the management sub-section. She has teaching experience in a monograde secondary school, but has never taught in a primary school. She also said that apart from an Irish consultant, sent by UNICEF in 1988/89, there was no expert on multigrade teaching involved in the preparation of the package.

To compensate for this, the authors visited multigrade primary schools during 12 days. This was done in order to observe multigrade classes and to experiment with multigrade teaching. They tried multigrade teaching in one classroom, in separate classrooms, and with separate blackboards for two or more grade groups, to find the best methods for multigrade teaching. Following this experience, three or four members of the PTTU wrote the training package. Each author wrote some sections, and the individual work was edited collectively. Pilot courses of teacher training using the training package were run for 12 days in Kathmandu and two additional districts.

The content of the training material is structured for ten sections, each of which is planned for coverage in one day. The following table shows the structure of the training material (PTTU, 1998)

The first four sections are more theoretical than the last six sections. In the first section, the definition, the situation and the reasons for multigrade teaching are covered. According to the material, there are three types of teaching in Nepal. They are grade teaching, subject teaching and multigrade teaching. Grade teaching is described as when one teacher teaches all subjects in a particular grade through a

whole year (monograde) Subject teaching is described as when the teacher teaches only particular subjects taught separately from each other (monograde) Multigrade teaching is described as when one teacher teaches either all subjects or some particular subjects to two or more grade groups simultaneously. After the definition of multigrade teaching, trainees are expected to discuss how they conduct multigrade teaching in their own schools and what their problems are. Then the discussion is shifted to why multigrade teaching should be conducted in Nepal.

Table 2 The structure and content of the training material

Sections	Titles	Topics
1	Types of teaching at primary level:	Types of teaching
	introduction of grade teaching,	Various situations of multigrade teaching
	multigrade teaching and subject	Reasons for multigrade teaching
	teaching	Conditions for multigrade teaching
2	Multigrade teaching programme	Timetable
	(strategies)	Classroom management
		Student management
		Evaluation and examination
		Students ' records
3	Multigrade teaching planning and	Lesson plans
	teaching techniques	Multigrade teaching techniques (SLA)
		Recreational /creative activities
4	Resources for multigrade teaching	Teaching resources (SLA)
		Skills for teaching
5	Construction of Self-Learning	Construction of SLA
	Activity (SLA)	
6	The use if teaching materials in	The use of SLA
	building up SLA	
7	Model demonstration class	Model demonstration class, observation form
8 and 9	Practice teaching	Practice teaching
10	Teaching practice and the	Review
	exchange of experience	

In the second section, a timetable, material on classroom and student management, evaluation, examination, and students 'records are included. Constructing a timetable is a major issue in the training. The basic programmes are about how to organise several grades at the same time into a lesson and who teaches them. When two or more grades are taught by one teacher, one grade should be the main class (named T class) and the others should be self-learning classes with a Self-Learning Activity (SLA) controlled by a selected monitor (named AM or AMT classes) Group work is encouraged. The students should be divided into groups and a leader should be

selected in each group.

In the third section, material on teaching planning, multigrade teaching methods, and creative activities is included. Making annual, monthly, weekly and daily lesson plans is suggested. This section concentrates how to manage two or more grades with attention to the grade whose teacher is physically absent. Once again, the importance of providing SLA and appointing the monitor is stressed.

In the fourth section, material on teaching resources and skills required for teaching is included. This section deals with how to make effective use of a blackboard, textbooks, pictures, reference books, games, songs, SLA and homework.

The fifth to ninth sections are more practical. The fifth and sixth sections specially emphasise SLA. The seventh, eighth, and ninth sections relate to the demonstration class and teaching practice. The trainer demonstrates a model multigrade lesson and then the trainees run a practice lesson. In order for each trainee to observe the demonstration and teaching practice of the others, an observation form is introduced in the seventh section. The observation form is comprehensive, including a timetable to indicate the place of the demonstration and teaching practice, grades, subjects, lesson topics and targets for the teacher, activities and achievements of the lesson, student learning rates and seven categories of suggestions. The tenth section is the concluding review of what has been learnt during the training.

VI. The Impact of the Training in the Scale of the Ladder

This paper demonstrates some positive impacts of Multigrade Teaching Training. In this research, two (Nuwakot-B3 and Kavre-12) of the five observed trainee-teachers did change their practice of multigrade teaching after the training.² Before the training, trainee Nuwakot-B3 taught two or more classes sequentially in order. After the training, she differentiated the main teaching class and the additional classes providing SLA and appointing a monitor followed by instructions and answer keys to him. She checked the SLA. Before the training, trainee Kavre-12 did not provide SLA to one grade while he was teaching in another grade. After the training, he provided SLA for the grade which he could not teach before starting teaching for another grade, and when he finished teaching the first grade, he checked on the SLA before starting teaching.

On the other hand, it is inefficient that only two out of five teachers changed but the rest of the three trainee-teachers did not change their practice in the classroom. Yet, this paper considers that this does not mean that the in-service training is useless. The difference between the two trainee-teachers who changed their practice and the other three who did not change involves not only the motivation of individual trainees but their context of multigrade teaching. In the training, the uniformed training was provided to all teachers in the same way, but the context of the recipients in relation to multigrade teaching was not same. To make it clear, the change made by teachers is analysed using the ladder of multigrade teaching shown in the figure 2 as a scale.

Before the training, trainees Nuwakot-B3, Nuwakot-B22 and Nuwakot-R2 taught at multigrade schools with pattern one. Teachers teaching at multigrade schools with pattern one can hardly change their multigrade teaching by themselves, because multigrade teaching does not take place within one class unit. The school has multigrade teaching, but individual teachers are not multigrade teachers as such. In schools with pattern one, multigrade classes are not identifiable. In this kind of structure, it is almost impossible for an individual teacher to implement the innovations demanded in the training. Thus the multigrade teaching of the trainees Nuwakot-B22 and Nuwakot-R2 did not change after the training, because of the absence of structural change in multigrade teaching at their school.

Despite working at multigrade schools with pattern one, trainee Nuwakot-B3 moved from 'pattern one' to 'pattern three' after the training (Figure 3). Trainee

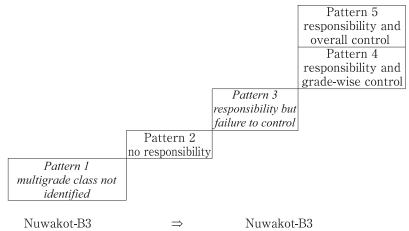


Figure 3 Movement of trainee Nuwakot-B3 on the ladder of multigrade teaching

Nuwakot-B3 organised multigrade classes according to pattern one before the training, because she used to work in a school using this pattern. In the year before her training course she was transferred from the school using pattern one to her current school using pattern four. In her current school, the headmaster had already undertaken Multigrade Teaching Training and organised his multigrade school in a way which allowed for the clear identification of multigrade classes. The timetable identifies the multigrade classes so that the responsibility of a teacher is clearly marked out. The headmaster managed his multigrade classes using pattern four. However, even after transfer, trainee Nuwakot-B3 continued to manage multigrade classes according to pattern one, because this was the only method she was familiar with. As a result, before the training, she was teaching according to pattern one in a school using pattern four. During training, she learnt about new management methods and techniques like SLA and the appointment of a monitor. After the training she adopted these new techniques and started to manage two or more classes at the same time.

Her management style for multigrade classes changed completely. Before the training, she did not identify her multigrade classes as multigrade and conducted teaching according to pattern one. After the training, however, she identified the multigrade classes and differentiated the main teaching class and the additional classes (pattern three) She provided SLA and appointed a monitor, providing instructions and answer keys to him. She checked the SLA. The content of SLA set by trainee Nuwakot-B3 was not limited to copying or reading from the textbook. Yet the amount of SLA was not always sufficient to cover the whole self-learning time. She increased her extent of simultaneous responsibility for two grades, but it did not reach the level of patterns four and five, fully occupying two grades at the same time.

Trainees Kavre-12 and Kavre-3 teach at multigrade schools with pattern two before the training. Although trainee Kavre-3 did not change his practice in relation to multigrade teaching, trainee Kavre-12 changed his multigrade teaching.

Before the training, trainee Kavre-12 divided the lesson period into two parts and taught two grades in turn. While he taught one grade, he paid no attention to the other grade and did not provide SLA for it (pattern two) After the training, he still taught the two grades equally in turn within one lesson period. However, before

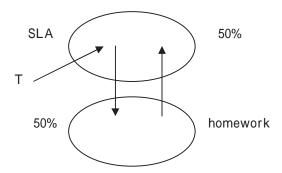


Figure 4 Multigrade class organisation 'Pattern 2+SLA'

starting teaching for the first grade, he provided SLA for the other grade. When he finished teaching the first grade, he checked on the SLA of the other grade before starting teaching it. When he finished teaching the first grade, he seemed to think that the lesson for this grade was finished. However, although he did not look after the first grade during the second half of the lesson, normally the students did receive homework and started working on it. This means that students of the two grades had always SLA or homework to keep them occupied during the whole lesson period (Figure 4)

In comparison with the situation before the training, the time students of the group were occupied definitely increased. This is because the students of the second group were totally neglected before the training, with the students not being assigned any

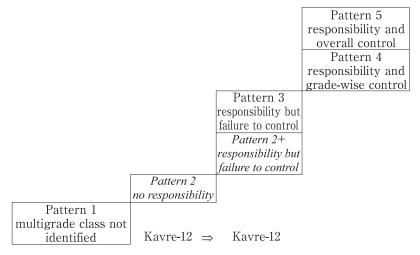


Figure 5 Movement of trainee Kavre-12 on the ladder of multigrade class organisation

tasks. After the training, trainee Kavre-12 provided instructions to do some particular work, and thus the students were engaged. Although his class management seems to continue in pattern two, the training influenced the trainee Kavre-12 in terms of his feeling of responsibility for two grades. His class organisation certainly moved on the ladder of multigrade class organisation from 'pattern two' before the training to 'pattern two plus SLA' after the training (Figure 5) Specifically, he increased the extent of his responsibility for two grades. Before the training, he assumed responsibility for each grade only for half of a lesson period. After the training, he looked after the two grades for the whole lesson period.

VII. Conclusion

Although teacher training is such a key factor in the quality of education, many educational research and assistance organisations are often critical for training particularly in-service training by the fact. There are two theoretical models of training and change: provider-oriented and recipient-oriented. Among the two models, some researchers conclude that training fails to achieve its purpose because the implementation of training tends to overlook 'recipients' in favour of 'providers.' Trainee-teachers do not adopt the training components when the training does not take into account the real world context where teachers work.

This paper presented one example of positive impact of in-service training. Two trainees did change their multigrade teaching after the training and their change extended the engagement of students during their self-learning time. In other words, the mechanism of the training functioned to change practice.

On the other hand, only two out of five trainees changed their practice. Why the rest of three trainees did not change their classroom practice? This paper concludes that it is not because of the mechanism of the training but because teachers did not see the need for a change or could not introduce the new innovation, as it was not adoptable in the real world context where they work. For example, the trainees who were allocated to a school with patterns two, three or four adopted some of the training components which they found had meaning for them. By contrast, the trainees who taught at a school with pattern one could not change their practice of multigrade teaching, because 'a multigrade class' was not identified in their schools.

As multigrade teaching occurs beyond a single classroom, it is difficult for teachers to change their classroom practice alone.

This Multigrade Teaching Training was developed by specialists based on research. National providers carefully considered to develop training inputs. However, they themselves in fact had never taught multigrade classes and were not familiar with multigrade teaching. Assumingly they could not reach to understand the deep context of multigrade teaching. Moreover, one single model of the training provided by the central government was provided nationwide. Thus the training was not fit to the diversity of practice of multigrade teaching with unsupported circumstances.

In the light of the reviewed two models of the innovation and change, this paper supports the second model. Even if the training is rationally justified by some trainees, it is not supported by others, because their real world context is very different. As Fullan and Hargreaves (1992) argue, the adaptation of the training components by the trainees is closely related to their real teaching-learning context. The way of their adaptation to the training components indicates that the mechanism of training can make a change when it precisely spots the potential needs and context of the recipients. Therefore, this paper concludes that the training can make a positive impact in the trainees' practice when the training matches with the teaching-learning context of the trainees.

Consideration of the context in which multigrade occurs is of the up most importance. Multigrade teaching is much more widely diverse than monograde teaching. The teaching-learning context of multigrade teachers is extremely complex given the gap between multigrade reality and the monograde classroom, textbooks, and teachers 'guides. A negative perception on the part of unsupported multigrade teachers tends to lead to passive behaviour and easy solutions. As a result, multigrade teaching consists of all these ambivalent factors and circumstances. This paper identified five patterns in the selected classrooms, but there must be many more varieties. In order to increase the number of trainees who can receive the benefits from the training, the context of the recipients must be considered more carefully with the training components and the context of the recipients being adjusted accordingly.

Notes

- 1 The major donors were ADB, DANIDA, IDA, JICA and UNICEF for phase one (BPEP1) and DANIDA, EU, FINNIDA, IDA, JICA, NORAD and UNICEF for phase two (BPEP2)
- 2 The practice of all of them in the classrooms in relation to general teaching methods was affected by the training. I include only the impact in relation to multigrade teaching here.

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