

A Study On The Perception Of Single Teacher Primary School Teachers About Multi-Grade Teaching

Naseer ul Haq¹, Dr. Abdul Nasir Kiazi² & Zia ulhaq kakar³

ABSTRACT

This research study was carried out to explore the multi-grade single teacher primary school teachers' perception about multi-grade concept. In this study all the participants were from multi-grade single teacher primary schools of district Quetta. Half of the participants, for this study, were from girls' single teachers' primary schools and half from boys' single teachers' primary schools of rural area of district Quetta. Teachers were asked to respond on areas such as perception, planning, classroom management, instructional skills, assessment and a crosscutting them of training need in all these areas. Two tools were used to collect data a questionnaire was used as research tool for the proposed study. The Questionnaire consisted of five Likert scale to collect Quantitative data. The data was analyzed by SPSS which shows that majority of STPSs concept about multi-grade is not clear even though they are working in multi-grade situation. The teachers' concept about planning, classroom management, instructional skills and assessment in multi-grade were not clear. The teacher strongly demanded training in multi-grade teaching.

Keywords: Multi-grade, Assessment, Classroom management, Instructional skills, planning, Single Teacher Primary School (STPS), Pedagogy

INTRODUCTION

Discriminations in terms of admission, retention and completion compromise the provision of quality education in schools in Pakistan. Like other developing countries in south Asia rural communities remain disadvantaged compared to their counterparts in urban areas of the country. Increase primary

¹ M.Phil, Scholar, Institute of Education and Research, University of Balochistan

² Assistant Professor, Institute of Educational Research, University of Balochistan, Quetta

³ Subject Specialist Bureau of Curriculum Balochistan Quetta

school enrolment and completion rate to 100% & literacy rate to 90% (vision, 2015) and the achievement of the Sustainable Development Goals number 4SDG quality education; universal primary education UPE and gender equity require special efforts in rural areas such as the use of multi-grade education. Multi-grade education is recognized as the viable option for promoting access to basic education for disadvantaged children, especially those living in rural areas. Teachers have not been trained in multi-grade teaching as all inputs assume a 'normal' school. This impedes the teaching learning process in the classroom (BESP, 2013-18). It is important to know the perception of working multi-grade teachers about multi-grade pedagogy, planning, classroom management, instructional skills and assessment in multi-grade teaching. Since 54% of multi-grade schools are single teacher primary schools STPSs. It is important to know the perception of those STPSs.

REVIEW OF LITERATURE

The literature review for this study is in following sequence first the definition and meaning of Multi-grade teaching learning then condition for multi-grade teaching, rational behind it. Then the prevailing models of multi-grade teaching, next is advantages and disadvantages of multi-grade teaching, professional development needs of teaches working in multi-grade teaching and learning contexts, the perception of teacher teaching in multi-grade. Multi-grade prevalence worldwide, multi-grade in Pakistan, in the last multi-grade situation in the province of Balochistan and situation in Quetta district.

The Meaning and Unanimous Definition of Multi-grade:

There is no agreement of researchers and educationists over the meaning of multi-grade teaching. It is not an easy task to make agreement. Little (2006) stated that. "in most primary schools around the world a single year grade at any time in the school day. This is known as mono-grade teaching. This may be contrasted with setting where a single teacher is responsible for a class formed of children from two or more year grades.

In UNESCO (1989) APEID papers these definition were given with respect to nations such as; Australia where pupils of a wide range of maturity and ages study under one teacher, usually for two or three years. The most extreme

example of a multi-grade class is a one-teacher school where a single teacher has responsibility for all grades.

In Bangladesh the rural, isolated and sparsely populated areas, for want of sufficient number of students in different grades, a single teacher and in some cases two teachers are appointed to a multi-grade teaching school; so the multi-grade schools have 5 grades, 1 or 2 classrooms and one or two teachers UNESCO (1989).

Condition for Multi-grade Teaching:

As stated in UNESCO (APEID) for the millions of learners living in remote, sparsely population mountain regions, deserts, islands, lagoons, plains and other inaccessible areas multi-grade teaching is the only option. Multi-grade teaching implies where the school situations where the number of pupils in different grades is so small that the pupils of several grades together add up to a normal or slightly larger than normal class.

Prevailing Models of Multi-grade Teaching:

Pridemore (2004) claims that instructors in Multi-grade school faces troubles that why he adopts mono-grade curricula for Multi-grade classes. So she identified four models of curriculum for instructors to adopt any one of them to attain the aims of multi-grade teaching. She also related these models to the learning theories that inform the teachers and tried to build an understanding of a possible pedagogy for multi-grade teaching. These models are Quasi Mono-grade Curriculum Model, Different Curriculum Model, Multi-year Curriculum Cycle and Material Center Curriculum Model.

Quasi Mono-grade Curriculum Model:

This curriculum Model has been implemented in many multi-grade settings. In this model teacher instructs in one grade or mono-grade class while other classes work at their own or keep busy by teacher in certain tasks like (reading, writing, memorizing or painting). The teacher has planned to rotate after some time and give instruction to another grade or class. This process is continued until all grades in the class are taught. Pridemore (2004) says that this is a traditional model of teacher centered approach there is no collaboration amongst the learners no interaction with other grades. Little (2005) is of the view that in this strategy teacher adjusts his/her time table in

according with needs of the students, to some grade more time is given and to some grade time is consumed which depends upon the nature of subjects and content.

Differentiated Curriculum Model

Vithanepathirana (2006), in this model the strategy looks an opposite of the Qusai mono-grade curriculum model. In this model the teacher communicates/instructs theme/ general topics to all grades at the same time. This multi-grade model is prevailing in Vietnam, Finland and Sri Lanka. The teacher uses one theme for all grades at the same time. The beginning and closing of the lesson same for whole class, but the teacher in the middle of the lesson differentiate the work and tasks for different grade or class so the learner work on their own and they found an opportunity for peer work or collaborating learning and self-directed learning.

Multi-year Curriculum Cycle Model (*also known as rolling programmes*)

The learners have to work in two consecutive grades throughout common theme/ activities together but begin and ends of the curriculum is at different times in this curriculum model Denial, (1988). Pridmore (2007) gives an example of grade three and four in a composite class; that teacher teaches the curriculum of grade four to both classes so at the end of the year grade four is promoted to fifth and three is promoted to four and the new grade three is promoted from grade two. It develops the same blend of grade three and four while in this year the teacher will work on the curriculum of grade three. When the second year is completed the teacher instructs the grade three curriculum to both classes, so multi-year curriculum cycle means that the teacher instructs the same content to two grades but at different time.

Learner and Materials Centered Curriculum Model

In this model student work through interactive, self-study learning materials. The teacher may stimulate and check on learning but students rely mostly on the materials.

A well-known example of this model is the Escuela Nueva Programme that has been implemented in rural schools in Colombia for more than thirty years. In this programme the mono-graded National Curriculum for each subject has been reorganized into a series of graded modules through which students work using individual learner guides. These guides are structured to integrate

both content and process and have continuous assessment built in to support learning. Classroom observation has shown that although students work through the guides individually and at their own pace they sit in small groups to increase opportunities for collaboration and enhance social and cognitive learning. A student only moves on to the next guide when he or she has achieved mastery at the present level stated by Pridmore (2007).

Little (2005) summarized it that this model depends on students learning through material rather than teachers input.

Advantages and Disadvantages of Multi-grade Teaching:

Many educationists are in favor of multi-grade teaching but great number of educationist are not in its favor. The supporters of multi-grade teaching feel that this approach provides an opportunity of access to education in scattered population of rural areas. Teachers feels that integration of curriculum in multi-grade setting, individualizing instruction and inadequacy of teachers are the basic problems of multi-grade teaching. However lac of understanding and lack of personal attention are the main causes of these phenomena stated by Little, (2006)

Advantages of Multi-grade Teaching:

Multi-gradteaching has following advantages collected from dives researches

- i. Multi-grade teaching provides opportunities to learners for basic education in rural areas.
- ii. Multi-grade schools maintain the village identity and cultural life.
- iii. In multi-grade setting students can achieve higher achievement in mathematics, languages and science due to learning in cooperative learning environment.
- iv. Students in multi-grade setting are found to be more obedient as compare to mono-grade students which shows significant gain in reading and language Longue, (2006)
- v. Students, “learn to learn” and “learn to teach” in independent query and peer tutoring strategies applied in multi-grade schools.
- vi. A learning environment is created by elder students to support the younger by helping and guiding them so in the result of this a strong social relation is developed by this interaction Frosco, (2004)

- vii. In the situation the students learn through integrated curriculum and each and every student learns with their own speed and pace.

Disadvantages of Multi-grade Teaching:

In Thomas and Shaw (1992) view point these are some disadvantages of Multi-grade teaching.

- i. Student's achievements may fail without properly trained teachers and required resources provision to multi-grade schools.
- ii. In multi-grade class it is observed that few students may get less individual attention of teacher and often work independently.
- iii. It is very difficult for multi-grade teacher to teach all the topics of every grade present in the class from curriculum or textbooks within the stipulated time.
- iv. The perception of over burden for teachers while teaching in multi-grade class, create lack of interest amongst the teachers; which may be initiated due to lack of classroom management skills of multi-grade class.
- v. Inappropriate teaching learning materials also effects the outcomes achievements of teachers and the academic performance of learners.
- vi. Pratt and Treacy, (1986) are of the opinion that more time is needed for preparation of tests for assessment there for not enough time is given to individual attention of students and activities in the whole day.
- vii. The teachers in multi-grade classes have to teach the curriculum of mono-grade, thus the teachers feel more relaxed compare to work in multi-grade class while he has to bear three times more burden than mono-grade while teaching in multi-grade situation.

Professional Development Needs of Teachers Working in Multi-grade Teaching and Learning Contexts:

The required skills and behavior and coordinating activities of multi-grade classroom teachers' are more difficult than the mono-grade classroom teacher. Lingman, (2007).while Kyne. (2005) acknowledged the point made by the teachers of multi-grade setting that multi-grade classroom is more of a challenge than mono-grade classroom. It is logical to suggest that teachers working in multi-grade situation need serious, ongoing teacher training and a commitment to hard work. Tsolakidis et al (2005) found that these common

needs among multi-grade teachers in Europe; newly appointed teachers in multi-grade school seldom get nationally organized, Orientation seminars on this special type of schools. There is lack of effective implementation of methodology. As a result, the curricular requirement in multi-grade schools suffer; teachers have no theoretical background on how to teach in multi-grade classroom, in most of the subject called multi-grade teaching is taught,

(a) There is a lack of methodological approach concerning the use of new technology assist teaching in multi-grade schools.

(b) There is lack of continuous the use of new technologies assist teaching in muti-grade schools.

(c) There is a lack of communication between multi-grade schools and community.

The needs analysis produced by Tsolakidis et al (2005) focused on a determination of the skills required of the multi-grade schools, their problem and weaknesses, the needs of teachers and to identify whether these needs are common for four countries or differ reflecting a specific situation in each country independently, on the basis of the report of the study, these needs were further subdivided and grouped in categories as under:

(1) General issues (2) Curriculum issues (3) Preparation of lesson plan in multi-grade school teaching (4) Methodological authorities (5) Working issues (6) Social and cultural issues (7) Training program issues (8) Students grouping issues (9) The role of ICT (10) Infrastructure (11) Admonition/time management (12) cooperation with local and education authorities.

The perception of teachers about Multi-grade classroom

Several studies focus on teachers perception of the benefits for students of learning in multi-grade setting. UESCO /APIED in this study theses points were concluded.

- Learners develop self-study skills
 - Learners cooperate across age groups, resulting in collective ethics, concern and responsibility
 - Learners help each other
 - Teachers can organize both remediation and enrichment activities for low and high achievers respectively more discreetly than mono-grade classes
- Nawab A (2011) explained the behavior of teachers that in the pre-interview, the teachers were collectively of the opinion that accommodating two level in

one room and teaching these levels one by one was multi-grade teaching. When the teachers were trained and they went through the concept of multi-grade teaching and they engaged themselves in developing lessons for micro teaching and their daily written reflection about learning and in post interview it was observed that teacher had developed a totally different view of multi-grade teaching. It was also observed that when they recognize that there will be no further support and follow up and reporting from training staff; they gradually turn to their previous and easy practices as multi-grade needs a lot of hard work and patience. They lack motivation and commitment to carry on the innovative practice without external support and supervisions.

MULTI-GRADE PREVALENCE:

A number of terms such as multi-grade, mixed year, combination class, vertical groups, family grouping, composite class, split class, double-graded class and unitary schools' are used across the world to describe multi-grade situation Berry & Little (2006). So the term multi-grade teaching is used for a classroom in which one or two teachers are responsible for teaching children of two or more classes, grades or level in same room at same time Little, (2006) . In 2005 and 2006 by little and UNESCO (2007) data which shows that around 30% of children worldwide and in the low income countries were then in multi-grade schools. Multi-grad classes are found in many developed countries including USA, UK, Canada, Australia, Germany, Finland, France, Russia and Ireland and in developing countries such as in South America Brazil, Peru, Colombia, in Africa multi-grade are common in West, Central, Eastern part and southern part of the continent such as in Zambia, Kenya, Uganda, Tanzania, Mali and South Africa while in Asia these countries experience multi-grade teaching like China, India, Vietnam Bhutan, Nepal, Bangladesh, Sri Lanka, Pakistan and several other countries. In the low income countries, multi-grade classes are a predominant feature of the education particularly in the rural and remote areas

According to 2017-18 Pakistan educational statistics AEPAM the total number of educational institutions in Pakistan are 305,546, out of these 202,106 in public sector, and 72,325 are in private sector and 31,115 Deeni Madaris are functioning in Pakistan. In Pakistan there 150,129 primary schools, out of these 131,376 (88%) are in public sector, whereas, 18,753 (12%) are in the private sector. The primary stage of education in Pakistan

enrolls 19.351 million learns/students. (Pakistan Education Statistics 2016-17).from data it is clear that at primary level the teachers ratio to school is 1:3 and teachers ratio to students is 1:42. In this data multi-grade teaching is not mentioned while in the context of Pakistan which is a developing country the approach of teaching in multi-grade setting exists but it is not officially recognized.The Annual Status of Education Report (ASER) 2019,report shows that 46% of government and 26% of private schools impart multi-grade teaching at grade two. Whereas, in grade four, multi-grade teaching was at 18% in both government and private schools. And a teacher taking multiple grade classes in government middle schools has risen from 5% in 2018 to 18% in 2019. Pakistan ranks on 129th for Health and Primary Education among 137 countries (World Economic Forum 2017-2018)

The province of Balochistan is with less and scattered population a poor province of Pakistan; it has limited financial resources and limited schools; Government of Balochistan has 13674 public schools in their 34 districts out of which 11273 are primary schools, there are 10525 multi-grade schools which is 90.26% of total primary schools (these schools have one, two or three teachers) while there 6093 schools are single teacher primary schools STPS which is 54.04% of total primary schools of public sector schools of Balochistan. (BEMIS, 2018). In developed countries multi-grade teaching is adopted as teaching strategywhile in context of Pakistan and in Balochistan it is adopted as substitute to shortage of teachers and schools.

District Quetta is taken as case study for this study. Quetta is the provincial capital and largest city of province Balochistan, it is also the 10th biggest city of Pakistan with population 1.001 million, according to census 2017. In Quetta District there are 637 public sector schools out of which 93 are secondary, 100 are middle (Middle school having classes from KG to class 8th) 439 schools are primary (primary school have classes from KG to 5th class). The total Multi-grade schools are 219 out of which 154 schools are for boys and 65 schools are for girls. There are 33 Single teacher Primary schools (BEIMS 2016-17)

RESEARCH METHODOLOGY

Research Design:

This study was conducted with Quantitative design approach and twotypes of tools were used.Likert scale questionnaire was adopted for collection of

participant responses regarding multi-grade perception, classroom management, planning, instructional skills, assessment in multi-grade classes, for this study and the other tool was used to collect the demographic data. In questionnaire the responses indicate how strongly they agree or disagree with a series of statements. In questioner the first response was not at all, second seldom, third some time, fourth was most of the time and last was every time.

DATA COLLECTION FOR STUDY

This study was descriptive in nature. The researcher used two tools for data collection one demographic and the other is Likert scale questionnaire for quantitative data.

POPULATION OF THE STUDY: All single teachers primary school STPSs' teachers of rural areas of district Quetta were the population study. The total number of the STPSs' in rural areas of Quetta district were 33 and the researcher randomly selected 16 STPSs' which is 50% of total population. Out of these selected teachers 50% of teachers were male and 50% were female. So in this research 8 male STPSs' and 8 female STPSs' were selected for study.

SAMPLING TECHNIQUE AND SAMPLE SIZE: Stratified sampling technique and convenient was used as sampling technique for this study. In first strata girls and boys single teacher Primary schools, were identified and out all 33 single teachers primary school STPSs' teachers of rural areas of district Quetta.. In second strata 8 girls and 8 boys schools and 16 teachers was selected for this study; nearly 50% of total STPSs' of District Quetta were selected for data collection. This research study collectively had the data, participants N=16

RESEARCH INSTRUMENTS AND TOOLS:

The study used a questionnaire to collect data from the participants. The questionnaire comprised of two sections. Section one consisted of questions concerning respondents' demographics while section two, with five Likert scale, aimed to know teachers responses on multi-grade teaching.

DATA COLLECTION PROCEDURE:

The researcher collected data personally from the school teachers. The tool was administrated through face to face interaction with 8 male STPS teacher

and 8 female STPS completed their tools through DDOs of their respective areas so total 16 teachers participated in this activity.

RESEARCH ANALYSIS TOOLSThe data was analyzed using SPSS

RESULTS

The perception of Single teacher Multi-grade school teacher about Multi-grade teaching is, as we see in table (Table 1) and graph (Figure 1), that majority of the primary teachers' perception about multi-grade are not clear up to know even they are working in multi-grade schools. The data suggests that their perception was not cleared even in pre-service professional development course. Which shows that there is no sufficient knowledge or teaching learning practices in the area of multi-grade concepts and its practical implementation that why the perception is not cleared up to date. It can be viewed from the responses that the perceptions of single teacher primary school multi-grade teacher about multi-grade is not clear to one third teachers and quarter of teachers have concept to some extent. Similarly, the data informs that more than 50 percent of the teachers are on lowest level of understanding of multi-grade teaching. The findings suggest that the participants need basic knowledge of multi-grade teaching. Their engagement the relevant capacity building programs seem to be a viable approach for their understanding of multi-grade teaching related pedagogical skills and approaches. The data also depicts teachers capacity building needs in this regard. It was found that two third of the responding were strongly in favor of training need.

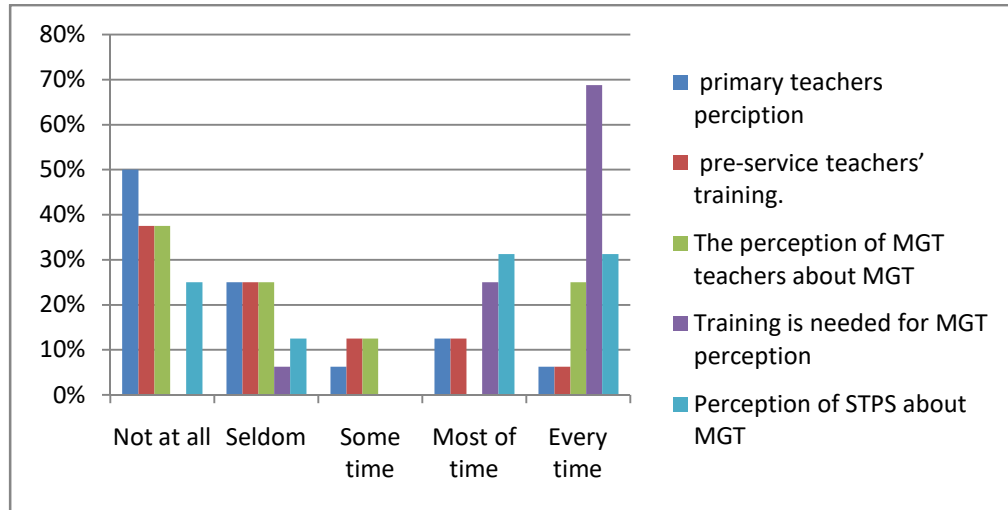
Table 1.

S#	Statement	Not at all	Seldom	Some time	Most of time	Every time
1	The perception of Multi-grade teaching is clear to primary teachers.	8	4	1	2	1
2	The perception of Multi-grade school is cleared through pre-service teachers' training.	7	4	2	2	1

3	The perception of Single school Multi-grade school teachers' about Multi-grade school is clear.	6	4	2	0	4
4	Training is needed for developing clear perception of Single teacher Multi-grade school teacher about Multi-grade school.	0	1	0	4	11
5	You have a clear Perception of teaching in Multi-grade school	4	2	0	5	5

Table 2. Data in percentage

S#	Statement	Not at all	Seldom	Some time	Most of time	Every time
1	The perception of Multi-grade teaching is clear to primary teachers.	50%	25%	6.24%	12.5%	6.24%
2	The perception of Multi-grade school is cleared through pre-service teachers' training.	37.5%	25%	12.5%	12.5%	6.24%
3	The perception of Single school Multi-grade school teachers' about Multi-grade school is clear.	37.5%	25%	12.5%	0%	25%
4	Training is needed for developing clear perception of Single teacher Multi-grade school teacher about Multi-grade school.	0%	6.24%	0%	25%	68.75%
5	You have a clear Perception of teaching in Multi-grade school	25%	12.5%	0%	31.25%	31.25%



Discussion:

Multi-grade education is accepted as the viable choice for promoting access to basic education for deprived children, especially those living in rural areas. The teachers of multi-grade schools have not been trained in multi-grade teaching as all inputs in their multi-grad schools are assume a 'normal' school of mono-grad. This impedes the teaching learning process in the classroom are same for both system. (BESP, 2013-18)As we see that multi-grade teaching is adopted in develop countries as strategy while it is adopted in developing are under develop countries as an alternate to shortage of schools, teachers and learners. As we observed that multi-grad teaching and multi-grad approach is been used worldwide but this system of education is not recognized officially by any government because there is no distinct curriculum for multi-grad schools. It is also realized that in pre-service education and teachers professional development there were no courses for multi-grad teachers in Pakistan.

It is also understood that all teachers are developed on the formation of mono-grad. The studies revealed that the perception of multi-grade teachers is not clear even though they are working in multi-grad scenario it shows that their educational philosophy is not clear to them. They are working in a condition where they have to teach six classes in one class room with different subject Ares. The teaching approach of multi-grade teachers are teacher centered that there is no cooperative learning environment in their classes. It was observed

that the condition of single teacher primary school is more challenging than the other multi-grade schools because the teacher is performing diverse roles in their schools. He serves as head teacher, class teacher, school planner, record keeper, community mobilizer, examiner and the possible school work to be done by one person that is that teacher.

In this research it is detected that the entire single teacher primary school multi-grade teacher responded that professional development is their main desired.

CONCLUSION

- It is concluded that primary teachers' perception about multi-grade is not clear up to know even they are working in multi-grade schools.
- It is also concluded that teacher perception was not cleared even in pre-service professional development course. Which shows that there is no sufficient knowledge or teaching learning practices in the area of multi-grade concepts and its practical implementation that why the perception is not cleared up to date.
- There was an extraordinary demand for professional development of multi-grade in single teachers primary school teachers on the multi-grade perception and pedagogy through in-service training.

Recommendations

The researcher recommended that following in the light of this research study findings and conclusions.

- The researcher found out that the perception of multi-grade teachers about multi-grade pedagogy has great importance in the professional career. Therefore it is recommended that the teacher transferred to multi-grade school especially to single teacher primary school must be trained before transfer or appointment.
- The perception of teachers' was not developed even in pre-service training it indicates that there is no course in pre-service which supports teachers for understanding multi-grade pedagogy. So the pre-service training courses should be readdressed by their respective institutions, colleges, universities or board of curriculum developers for primary school teacher professional development.

- From this study it is calculated that teachers working in multi-grade single teacher primary schools demanded training for developing their perception of single teacher multi-grade school teachers. There for it is highly recommended that the teachers appointed or transferred to multi-grade school must be trained and in training their perception of both mono-grade pedagogy and multi-grade pedagogical philosophy must be part of the professional development.

Further research

This study gives information about different aspect of single teacher primary school teachers needs meeting, it cannot provide information regarding requirements and need of such schools therefor it is proposed that studies in these few areas may be conducted to identify the needs of STPS .

- This study was conducted for single teacher primary school teachers' perception of multi-grade pedagogy in rural schools of Quetta district, a study of the same nature may be conducted for all provinces of Pakistan so that to identify the perception of single teacher primary school teachers about multi-grade pedagogy.
- A study is needed to be conducted to investigated the courses of multi-grade teachers for primary school teachers in pre-service trainingprogramme.
- There must be a study regarding professional development of teachers in the field of planning for multi-grade classes in single teacher primary school while using mono-grade textbooks.
- A study must be conducted to know the understanding of multi-grade teachers, that what particular planning is need in Multi-grade classes.

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