THE IMPACT OF MULTI-GRADE TEACHING ON STUDENTS’ PERFORMANCE AT ELEMENTARY LEVEL IN KHYBER PUKHTUNKHWA

By

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Submitted in partial fulfillment of the requirements of the degree of

Doctor of Philosophy

In

Education

FACULTY OF ARTS AND SOCIAL SCIENCES

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PAKISTAN 2016
DECLARATION

I hereby declare that the material presented in my thesis, titled, “The Impact of Multi-grade Teaching on Students’ Performance at Elementary Level in Khyber Pukhtunkhwa” completed under the supervision of Prof. Dr Rabia Tabassum, is my own work and nothing is plagiarized.

___________________
(Shahzad Khan)

CERTIFICATION

I certify that the contents and format of the thesis submitted by Mr Shahzad Khan have been found satisfactory and the work is original to the best of my knowledge. I recommend it to be processed for evaluation by External Examiners for the award of the degree.

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(Prof. Dr. Rabia Tabassum)
APPROVAL SHEET

It is certified that the contents and format of the thesis, titled, “The Impact of Multi-grade Teaching on Students’ Performance at Elementary Level in Khyber Pukhtunkhwa”, submitted by Mr. Shahzad Khan have been found satisfactory for the requirements of the degree, hence, approved for the award of Ph. D degree in Education.

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Dedication

This study is dedicated to my father and mother whose love and prayers always took me to the peak of glory and transformed my dreams into reality.

*May Allah bless their graves, and their souls are in rest. Aamin*
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21. Teachers have access to instructional materials to support their instructions.

22. The teaching materials are relevant to current contents.

23. Teachers have practical guidebooks at their schools.

24. The teachers make proper use of instructional materials when teaching in multi-grade classrooms.

25. The teacher is trained for primary school teaching.

26. The teacher is trained for multi-grade teaching.

27. Multi-grade teaching needs more preparation and planning.

28. Teacher likes to teach in multi-grade setting.

29. Teachers consider multi-grade teaching more effective than mono-grade teaching.

30. Government provides support and facilitation for multi-grade teaching.

31. A system is existing for the assessment of teaching and learning process.

32. The teachers arrange group learning for students.

33. The teachers make arrangements for students’ individual learning.

34. The time table is followed strictly in the classrooms.

35. The timetable is flexible in accordance with the needs of the students.

36. Class rules and procedure are developed collaboratively among teachers.

37. Discipline is maintained in the classrooms.

38. Most of the time monitor supervises one grade when the teacher teaches to other grade.

39. The monitor role is to keep the students quiet.

40. The older students co-operate with the younger ones in their work.

41. The teaching and learning environment is conducive to academic process.
Parents involvement is important for multi-grade teaching  
Community is involved in management and support of multi-grade environment  
Parents communicate the teachers in education of their children  
Prominent personalities visit the school to solve local problems of the school  
Parents and teachers counsel (PTC) works together effectively  
There are two/three classrooms Primary Schools existing in this district  
There are multi-grade schools existing in this district where 1-3 teachers teach from prep to fifth classes  
The teachers of these multi-grade schools are properly trained for multi-grade teaching  
Special attention is paid to multi-grade teaching  
These multi-grade schools are officially entitled for multi-grade teaching  
The government is providing special financial support and facilitation for multi-grade schools  
Teachers are encouraged by the government with incentives who teach in multi-grade setting  
There is a separate curriculum for multi-grade teaching as compared to conventional schools’ curriculum  
The teachers adopt multi-grade teaching by necessity  
The curriculum taught in multi-grade schools is integrated  
The teachers adopt multi-grade teaching as an effective teaching approach  
Multi-grade schools are supervised and assessed regularly  
Sufficient teaching/learning materials are provided for multi-grade teaching  
Teachers use teaching/learning materials effectively in classrooms
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It, at this moment, will be injustice if the researcher forgets his friends, Dr. Eid Akbar and senior Ph. D. scholar Amin Khan Marwat who always shared my problems in research and provided me sincere advice and help whenever needed.

SHAHZAD KHAN
ABSTRACT

This study aimed at investigating the effect of multi-grade teaching on the students’ performance at elementary level. Multi-grade teaching is an educational setup where a single teacher has to teach more than one grades of students at the same time in a single classroom. Multi-grade teaching prevails in Pakistan, especially in rural and mountainous areas where due to lack of teachers, infrastructure, and students, one/two or three teachers teach six grades (nursery-5th) in multi-grade situation. The following objectives were achieved: (1) to investigate whether the teachers are properly trained for multi-grade teaching in multi-grade schools; (2) to investigate whether multi-grade teaching improves social interaction among the students; (3) to explore challenges and problems of multi-grade schools; and (4) to know whether government supports and facilitates multi-grade teaching.

Fifty District Education Officers (male and female), 50 Deputy District Education Officers (male & female), 150 assistant District Education Officers as Professional Support Staff, 71378 Primary School Teachers, 1,885,298 students of multi-grade government primary schools, and 20,032 multi-grade primary schools in Khyber Pukhtoonkhwa constituted the population of the study. Fifty government schools, 10 each from district Nowshera, Peshawar, Mardan, D.I. Khan and Abbotabad, 150 Primary school teachers, 30 each from the above mentioned districts, 40 from professional support staff, eight each from the mentioned districts were selected through purposive sampling. Assumptions were tested that multi-grade teaching improves social interaction among the students and teachers in multi-grade schools are not properly trained for multi-grade teaching. The researcher personally collected data through closed-ended three point rating scale questionnaires (mostly, to some extent, and not at all) one each for primary school teachers and professional support staff, and a checklist for direct observation.
The collected data were analyzed through statistical tools of percentage and Chi-Square. The findings of the study indicate that multi-grade teaching is not officially recognized, and not much attention is paid in this context, teachers are not properly trained for multi-grade situation, lack of instructional strategies, lack of provision of instructional materials, curriculum constraints, lack of parents and community involvement, and inadequacy of basic facilities affect the students’ performance at elementary level in Khyber Pukhtoonkhwa. This study may prove to be beneficial for policy makers and planners, curriculum developers, professional support staff, parents, teachers, and students.
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AARE</td>
<td>Australian Association for Research in Education</td>
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<tr>
<td>ABL</td>
<td>Activity Based Learning</td>
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<td>ACE</td>
<td>Advanced Certificate in Education</td>
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<td>ADEO</td>
<td>Assistant District Education Officer</td>
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<td>AEPAM</td>
<td>Academy of Educational Planning and Management</td>
</tr>
<tr>
<td>AIU</td>
<td>Allama Iqbal Open University</td>
</tr>
<tr>
<td>AKU-IED</td>
<td>Agha Khan University-Institute for Education Development</td>
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<tr>
<td>APEID</td>
<td>Asian Program for Education Innovation and Development</td>
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<td>ASER</td>
<td>Annual Status of Education Report</td>
</tr>
<tr>
<td>BRIDGES</td>
<td>Basic Research on Implementation and Developing Educational System</td>
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<tr>
<td>CMGE</td>
<td>Center of Multi-Grade Education</td>
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<td>DEO</td>
<td>District Education Officer</td>
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<tr>
<td>EFA</td>
<td>Education for All</td>
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<td>EMIS</td>
<td>Education Management Information System</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>INSET</td>
<td>In-Service Education of Teachers</td>
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<td>ITA</td>
<td>Idara-E-Taleem-O-Aagahi</td>
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<td>KPK</td>
<td>Khyber Pukhtoonkhwa</td>
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<td>MDG</td>
<td>Millennium Development Goals</td>
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<td>MGT</td>
<td>Multi-Grade Teaching</td>
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NWFP  North West Frontier Province
PDCC  Professional Development Centre Chitral
PDT  Professional Development of Teachers
PEAS  Punjab Education Assessment System
PST  Primary School Teacher
PTC  Parents and Teachers Counsel
PTC  Primary Teaching Certificate
SIMS  School Improvement in Multi-Grade Situation
UN  United Nations
UNESCO  United Nations Education Science and Cultural Organization
Chapter 1

INTRODUCTION

Education is considered as the basic right of every child within the state. It plays an important role in physical, mental and social development of a child’s personality. Education is vital for socio-economic development of a country (Khan, 2010). It accelerates economic growth through knowledge, skill and creative strength of society and building human capabilities (Pakistan Economic Survey, 2007-2008). So it is the sole responsibility of each and every state to provide education to all children within the state.

In the context of Pakistan, formal education has been divided into three levels. Elementary level comprises of grade 1-8, Secondary level consists of 9-12 grades and tertiary/higher education involves grade 13th and above, Khan (2010) states that elementary education is the basic education which provides foundation to secondary and higher education. Elementary education is a stage where students are prepared to meet future needs. Therefore, the emphasis should be laid on elementary education. When Pakistan came into being in 1947, the Quaid-e-Azam Muhammad Ali Jinnah had a great desire to promote education and eradicate illiteracy (Education Conference, 1947). But unfortunately, after his death education has not been remained the priority of any government, although good and encouraging proposal were made in all education policies and five year plans but unluckily, they were not implemented in its true spirit. (Farooq, 1993). Irfan (1995) is of the opinion that the reasons of non implementations of education policies and five year development plans are described as under:

i. The education policies do not become the part of five years development plans.

ii. The time of announcement of education policies and five year plans are quite different.
iii. The allocated amount for education is always less than to meet the needs, demand, and promises, even the specified amount is not fully provided, and that is why the targets of education policies are never achieved and the speed of education progress always remains slow.

iv. Poor planning for education is also a barrier in the way of progress of education.

v. Instable political conditions in the country badly affected the education policies of Pakistan to be implemented fully.

vi. Lacks of leadership have been always remained barrier for the implementation of education policies.

In Pakistan literacy rate is very low as compared to South Asian countries like India, Sri Lanka, and Bangladesh etc, which is very alarming and opens door toward terrorism and extremism. Lack of basic education is a silent killer of memories poorest children in the less developed countries (Gene, 2005). According to UNESCO (2003) all nations should ensure that education is a right for their entire citizen. Pakistan has also signed Jomtien declaration on education for all (EFA) in September 1990. Pakistan has to make sure to give access to all children to education and fulfill the promise in eradication of illiteracy by 2015. To do so the development of multi-grade teaching is one of the best strategies that will improve access to education particularly in rural areas where there are few teachers who handle all the grades. Multi-grade teaching is an educational setting (Prep – Fifth) classes where, a single teacher teaches more than one grades at the same time in a single classroom (Veenman, 1995). Berry & Little (2006) state that in multi-grade teaching one teacher, in the same classroom at the same time, takes responsibility for more than one grades. A number of terms such as combination class, vertical grouping, mixed years, family grouping, composite class, split class, double
graded, and unitary schools in the case of one teacher teaching from Nursery to grade V. However, in many schools there are two or three teacher schools that are responsible for teaching across two/three grades (Little, 2006). There are many schools all over the world which have multi-grade teaching. Multi-grade teaching is prevailing in about 30% of the schools worldwide and more than 50% in South African schools. Multi-grade teaching is not limited to developing countries only but many developed countries like USA, France, Canada, UK, Nether Lands, China Australia, Finland and Sweden have also this type of teaching (Veenman, 1995). According to Little (2006) multi-grade teaching takes place either by choice or by necessity. It is adapted by choice when the teachers decide to take it as pedagogic technique to organize their students in multi-grade setting. In India, China, Sri Lanka, Colombia and some developed countries multi-grade teaching is adopted as an effective teaching strategy. Mason and Burns (1997) are of the view that apart from this, there are certain conditions, where multi-grade teaching becomes necessity. These conditions are described as under:

i. Schools in area of low population density where schools are widely scattered, inaccessible, and enrolment is low for example, area wise Baluchistan is the largest province of Pakistan but population wise it is the smallest province of all provinces.

ii. Schools that consist a cluster of classrooms (1-8 class) at different places where some classes are multi-grade and some classes are mono-grade.

iii. Schools in area of population growth and schools expansion, where enrolments in the expanding upper grades remain small.

iv. Schools in the areas of population decline, where previously there was mono-grade teaching and where, now, only a small number of teachers are employed in the schools multi-grade teaching becomes necessity.
v. Such areas where parent send their children to more popular schools within reasonable travel distance, which leading to decline in the number of students and teacher in the less populous schools.

vi. Such schools where the deployed number of teachers justifies mono-grade teaching but where, the actual number deployed is less. The inadequate deployment arises for certain reasons including low teacher supply, teachers who are posted to school but who do not report for duty or teachers on medical or casual leave.

vii. Schools where the number of students admitted consist of more than one class grouping necessitating combining some of them with the students in a class group of different grade.

Those schools where the teachers absenteeism is high, multigrade teaching is adopted by choice when teachers in a school decide to take an effective teaching and learning strategy (Mason and Burns, 1997).

According to Mansoor, (2011) multi-grade teaching in itself is an effective teaching strategy used in areas of low population density like Gilgit, Baltistan, Azad Jammu and Kashmir and Chitral where 80% of primary schools under the supervision of Professional Development Centre Chitral (PDCC) the branch of Agha Khan University Institute for Educational Development (AKU-IED) working effectively and successfully in multi-grade setting (CREAT, 2008). In Australia, UK, Sweden and Finland multi-grade teaching is adapted by choice and is in practice effectively. Apart from above mentioned countries, there are several countries the worldwide which have not achieved the full target of student’s participations in primary school because of insufficient resources allocation for infrastructure development, unwillingness of teachers to teach in distant areas, lack of teachers, inadequate number of schools etc, in such
scenario some educationists suggest that multi-grade teaching can play an important role in fulfilling Education for all (EFA) and Millennium Development Goals commitments (Little, 2006).

Multi-grade schools need favor of teachers and classrooms as compared to conventional schools. Multi-grade school can be built cheaply and can be established in large number and can be easily located in rural areas (Mansoor, 2011).

According to UNESCO (2003) report, in Pakistan there is no concept of this phenomenon. Little or no attention is paid to multi-grade teaching. A specific number of teachers are posted in a school and if the number of teacher is insufficient for the requirement of the school multi-grade teaching occurs. In some cases only one teacher is appointed for any number of students and the teacher is compelled to teach them. Another cause of multi-grade teaching is that teachers do not want their appointment in rural areas; they use political support to avoid transfer (UNESCO, 2003).

Little (2005) is of the opinion that so many educationists are in favor of multi-grade classes, but a large number of educationists are not in its favor. Many feel that multi-grade approach provides opportunity of access to education in scattered population and rural areas, but teachers are also of the view that integration of curriculum, teaching in multi-grade setting, individualizing instructions, and inadequacy of teachers are the basic problems of multi-grade teaching. Even, the parents have also negative perception about multi-grade teaching. However, lack of understanding and lack of personal attention are the main causes of these phenomena.

Thomas and Shaw (1992) have indicated the pros and cons of multi-grade teaching as multi-grade teaching provides opportunities to learners for basic education in rural areas. These are also an efficient means of using less educational input, such as trained teachers, classrooms,
and materials. Multi-grade schools maintain the village identity and cultural life. In multi-grade setting students can achieve higher achievement levels especially in mathematics, language and science. Students in multi-grade setting are found to be more obedient as compare to mono-grade students show significant gain in reading and language (Logue, 2006). Multi-grade schools provide opportunities of education to girls in villages because those schools are located closer to home. Through independent query and peer tutoring, students “learn to learn” and “learn to teach”. Teachers and individual students develop a strong relationship with passage of time which helps the teacher to access the student and adopt different instructional strategies required. Multi-grade creates caring environment as a result older students help the younger ones and thus social interaction improves among the students (Frosco, 2004). The stigma associated with repetition is washed. Multi-grade grouping has positive effect on student’s attitude and behavior, without loss of academic achievements. Multi-grade system provides natural environment to students for play and project. Normally, in multi-grade classes age and achievement differences are accepted by the students. In this situation the students land to integrated curriculum. Children are able to work at different developmental levels without obvious remedies, thus, avoiding emotional or social damage caused by retention.

Thomas and Shaw (1992) have also described some disadvantages of multi-grade teaching. They are as: If properly trained teachers and required resources were not provided, student’s achievements may fail. Demands on teachers’ time and organizational capabilities are high; they need special training and perform their duty effectively. Students may get less individual attention and often work independently. The teachers have to teach more than one grade at the same time and they have completed the entire curriculum in the stipulated time, which is practically very difficult. Teachers always feel lack of time for teaching the required
Teachers feel over burden in multi-grade classes and over burden create lack of interest among them. In multi-grade situation teachers have lack of classroom management skills, inappropriate teaching and learning materials also affects the academic achievement of the students (Thomas & Shaw, 1992)

Pratt and Treacy (1986) are of the opinion that more time is needed for preparation, making of tests, and programming, for teaching. No enough time is given to individual attention of students and activities the whole day. The teachers in multi-grade classes have to teach the curriculum of mono-grade, thus, the teacher in mono-grade setting feel relaxed as compare to multi-grade because the teachers in multi-grade have three times more burden than that of mono-grade teaching.

1.1 STATEMENT OF THE PROBLEM

Multi-grade teaching is common in public sector schools, especially in remote and rural areas of Pakistan. In Pakistan multi-grade teaching is adapted as necessity. Therefore, the researcher was interested to find out the impact of multi-grade teaching on students’ performance at elementary level in the province of Khyber Pukhtoonkhwa.

1.2 OBJECTIVES OF THE STUDY

The researcher achieved the following objectives while conducting the study:

(i) To find out the impact of multi-grade teaching on students’ performance.

(ii) To investigate teachers training in multi-grade schools.

(iii) To find out whether multi-grade teaching improves social interaction among the students.

(iv) To investigate the challenges and problems of multi-grade classrooms.

(v) To investigate whether government facilitates multi-grade schools in Khyber
1.3 ASSUMPTIONS

The following assumptions were tested:

(i) There is no significant effect of multi-grade teaching on student performance at elementary level.

(ii) It is assumed that the teachers at elementary level are not properly trained for multi-grade teaching.

(iii) It is hypothesized that multi-grade teaching improves social interaction among the students.

1.4 SIGNIFICANCE OF THE STUDY

This study may prove to be beneficial for education policy makers and planners, curriculum developers, professional support staff, parents, teachers, and students.

1.5 DELIMITATION OF THE STUDY

The researcher narrowed down the boundaries of the study to only multi-grade government primary schools in five districts (Nowshera, Peshawar, Mardan, D.I.Khan, and Abbotabad) of Khyber Pukhtoonkhwa because of having different language and culture point of view, and to save time, money, and effort to get valid and reliable information for the analysis.

1.6 METHOD AND PROCEDURE

1.6.1 Population

Fifty District Officers (25 male and 25 female), 50 Deputy District Officers (25 male and 25 female), and 150 Assistant District Education Officers, 71,378 primary school teachers (45,366 male and 26,013 female), 1,885,295 enrolled students of multi-grade primary schools (1,189,063 male and 696,232 female) and 20,032 multi-grade primary schools including 2,543
one teacher schools, 7,836 two teachers schools, 3,882 three teachers schools, 2,061 four teachers schools, 1,405 five teachers schools, and 2,305 Mosque/Maktab schools in the province of Khyber Pukhtoonkhwa constituted the Population of the study.

1.6.2 Sample
Ten District Officers (five male and five female) two each from district Nowshera, Peshawar, Mardan, D.I. Khan, and Abbotabad. Ten Deputy District Officers (five male and five female), two each from the above mentioned districts. Thirty(ADEOs) Assistant District Education Officers from district Nowshera, Peshawar, Mardan, D.I. Khan and Abbotabad, Fifty multi-grade schools, ten each from district Nowshera, Peshawar, Mardan D.I. Khan and Abbotabad and 150 primary school teachers (PSTs), thirty each from the sampled districts were selected through purposive sampling as sample of the population.

1.6.3 Research Instruments
The researcher personally collected data by using the research tools of checklist for direct observation and close-ended three points rating scale questionnaires, one questionnaire for the Primary School Teachers (PSTs) comprised of forty five items and the other for Professional Support Staff composed of twenty items.

1.6.4 Data Collection
The researcher visited sample multi-grade schools and Primary School Teachers, and the Professional Support Staff at their offices and in the field and collected data from the participants personally on the aspects of curriculum, Instructional strategies, instructional materials, classroom management, teachers training, parents and community involved.

1.6.5 Data Analysis
The data collected through Questionnaires from the primary school teachers and professional support staff, observation checklist was analyzed through the statistical tools of percentages and Chi-Square test to know the significance of data.
Chapter 2

REVIEW OF RELATED LITERATURE

The review of related literature for the current study is presented in the following sequence of topics. First, the review is started with the meaning and definition of multi-grade teaching to give a complete understanding about the topic under discussion and than a concise historical background of multi-grade teaching in the prospective of Pakistan is described. After that, prevalence of multi-grade teaching worldwide is presented. Next, the rationale of multi-grade teaching is highlighted. In addition to this, theoretical and philosophical frame works of multi-grade teaching are discussed. And then, modes (models) of multi-grade teaching are shaded light upon. Following are; the condition in which multi-grade teaching is occurred. Next to this, evidence on the impact of multi-grade teaching on student’s achievement and productive personal and social effects are presented. Then, shed light upon the strategies used in multi-grade teaching are discussed. After this, the review is highlighted issues and challenges of multi-grade teaching. Next to this, advantages and disadvantages of multi-grade teaching are described, than professional development needs of teachers in multi-grade teaching and learning contexts are shredded light. Next to this, effective practices for multi-grade teaching are stated and at the end, assessment of multi-grade setting is highlighted. Finally, the researcher will add some concluding remarks and inferences of the current study conducted.

2.1 MEANING AND DEFINITION OF MULTIGRADE TEACHING

Researchers and educationists all over the world are not unanimously agreed upon the meaning of multi-grade teaching. It is difficult to make consensus on the meaning of multi-grade teaching because the concept remains deeply contested among the researchers and the educationists. What is the precise meaning of multi-grade teaching is still to be answered.
Little (1995) tried to specify the meaning of multi-grade teaching in her own words, little says, multi-grade teaching means to teach students of different grades, ages and abilities in the same group. It is different from mono-grade teaching in which students within the same grades are seemed to be more similar in term of age and ability. It is also different from multi-grade teaching; in multi-grade setting students of the same grade have variation in age. Wiki (2007) is agreed with Little’s statements but differs to that factor of grade, age, and student abilities are imperative in the conceptual description of meaning of multi-grade teaching. By inducting factors of grade level, age and students abilities in such description, one takes U-turn from defining the concept to stating it (Wiki, 2007). It is why PASTEP (2000) said with full confidence that multi-grade teaching occurs when a single teacher teach more than one grade at the same time in the same room. This is the same meaning that Vithanepathirana (2006) offers. According to Vithanepathirana multi-grade teaching is a teaching setting where one teacher has to take charge for teaching the students across more than one curriculum grades within the given time of period. This interpretation has resemblance with the prospective offered by Little (1995). Brunswick and Valerian (2004) found the way of discussing multi-grade teaching without concerning with the conceptual meaning, in their review of recent literature and project on multi-grade schools and classes in African primary schools context. They presented clues as to what multi-grade teaching look like. Brunswick and Valerian (2004:9) were of the view that multi-grade teaching is an educational setting where a single teacher is responsible for students of different age, grades and who study different curricula. Joubert (2007) defines multi-grade teaching as an educational setting where a teacher teaches students of different grades at the same time. Having different viewpoint about the meaning of multi-grade teaching, different educationists and researchers interpret multi-grade teaching differently.
Birch and Lally (1995) argue multi-grade teaching in Malaysia refers to the teaching of students more than one grades in one classroom. This combination is made of adjacent grades. For example prep and one two and three, or four and fifth etc and combination of grade one and three, grade two and four can also arranged. According to Little (2005) in Indonesia multi-grade teachings occur with a teacher teaching two or more grades at the same time in the same room or in different classrooms. Brown (2008) is of the view that in South Africa, multi-grade teaching exists but there is no policy of regulating the grades, how and which grades are to be combined.

In some countries the interpretation of multi-grade teaching is different, for example, multi-grade schools in Greece are called “Mono-grade Schools” which is totally opposite term to those used in Europe and elsewhere in Africa. This contradiction is due to the approach used in Greece. Brown (2009) says that Greeks count the number of teachers instead of grades combinations. Brown (2009) explains that in single teacher school where one teacher all grades (e.g. grade prep – 5th) are called mono-grade and the school where two teachers have been appointed are called two grade schools and so on. If there is a separate teacher for each grade than it is called multi-grade schools (Brown, 2009). Birch and Lally (1995) point out that in China terms multi-grade class and multi-group are used. These groups are arranged on the basis of ability; age, and grade differences. They further elaborate in multiethnic countries like Philippines, where one teacher teaching more than one grades in one classroom is called multi-grade class teaching. To overcome the challenges of multi-grade teaching, it is important to create common understanding about the phenomenon. Others terms like ‘multi level’ ‘multiple class’ ‘family class’ and ‘unitary school’ are also used for multi-grade teaching which further complicate the common understanding (Kyne, 2005). The terms like composite, combinations class, split class. Vertically grouped, blended classes, double class, which further make it
complicated (Russell, Rowe, and Hill, 1998).

Kyne (2005) emphasizes that multi-grade teaching is understood in the first sense, it is referred to the teaching setting where students of different grades are taught by a single teacher in the same room. Nawab and Baig (2011) are of the opinion that in Pakistan, two or more grades are adjusted in one classroom. And a single teacher teaches one grade and then moves toward the other grade engaging the former group in some activity and the later is taught by the teacher. This is also a form of multi-grade setting but it cannot be compared with the one, in which the teachers integrate related and similar concepts or themes across contents of various grades.

2.2 HISTORY OF MULTIGRADE TEACHING IN PAKISTAN

According to Farooq (1993) Pakistan is very young as a nation but its culture is an ancient one. The concept of multi-grade teaching prevailed in the earliest days of Islam. The Muslim learnt the values which are basic to the Muslim society. In the maktab the curriculum was composed of those parts of the Quran which every Muslim wanted to learn by heart in order to perform his devotion and religious function (Farooq, 1993). These activities of teaching and learning have been continued, even today in deeni madaris (Mosques) where students of different age, abilities and level assembles and acquire knowledge of religious education from Paish-E-Imam or may be another learned person. According to Rahmat Ali Farooq (1993) the demographic characteristics of rural area of Pakistan is a hurdle in the way of expansion of primary education.

These areas are scarcely populated; other major problems are inadequate resources, lack of teacher’s, expenditure on construction of building for schools and required time for the completion of these building. To achieve of goal of universalization of primary education, the educationists in Pakistan made plan to use of the mosque for the promotion of education. The
scheme was named as maktab scheme. Maktab scheme was started in Bahawalpur division. It was a successful scheme toward universalization of primary education. In the first 15 months 60 thousand boys and girls were given admission said Ghulam Shabbir Bokhari in a published paper. These maktab are pure example of multi-grade teaching in Pakistan. These schools were opened in the areas where there was no school in the village. The Muslim Imam was the teacher, aged (5-9) boys and girls of the village were the students, and mosque was the school and it exists till now. The prescribed regular primary school syllabi were taught (Farooq, 1993).

According to Warwick, Reimers and McGinn, (1989) in Pakistan 58% primary schools are multi-grade schools. Mansoor (2011) is of the opinion that multi-grade teaching is prevailing but not in true since and spirit. She further explains that less or no attention is paid to multi-grade teaching. It occurs when the appointed teachers are not appropriate to the number of students. Sometime, only one teacher is assigned to a school and multi-grade teaching results. Due to lack of infrastructure and transfer of teachers to remote area where they do not take charge and use political support which causes multi-grade teaching (Mansoor, 2011). However, multi-grade schools are not officially recognized in Pakistan. It is not adopted as an effective approach in the country but adopted as de facto solution to the inability and incapacity of the system to overcome the needs of education in the country. According to UNESCO/APEID (2003) reports, there is no concept of multi-grade teaching and no special professional preparation in Pakistan. Generally, teachers are appointed on the basis of primary school certificate (PTC) for multi-grade teaching in remote areas and get training of multi-grade teaching through experimentation and experience use different techniques and strategies of teaching (ASER, 2011) Chapman and Adams (2002) are of the view that multi-grade teaching should be immediately officially recognized. Once it is officially recognized as a specific type of teaching, the education department will start and try to
understand the nature and extent of the needs of multi-grade setting and will pay special attention to these phenomena.

2.3 PREVALENCE OF MULTIGRADE TEACHING WORLDWIDE

Multi-grade teaching is a teaching phenomenon widespread in educational systems worldwide. Many scholars who reviewed the field are of the view that in some countries, the data on multi-grade teaching is not properly and systematically collected (Kyne, 2005, Veenman, 1995). According to Little (2011) a variety of data has been collected from different sources on multi-grade teaching. The data indicate the presence of such schools the world over such as in Europe, North America, Asia, Pacific region, Latin America and Africa. The number of multi-grade schools and number of students in such schools have significantly increased over the last fifteen years (UNESCO, 1996). The prevalence of multi-grade teaching is very high in Europe for instance; the available data shows that 53% primary school teachers in Nether Land teach in multi-grade settings (Commission Evaluative Barison derwijs, 1994). Pride more (2004) is of the view that in England more than 25% of primary schools and in Scotland 26-28% of all primary schools operate in multi-grade environment (Scottish executive, 2002). According to department of education and science (2004) more than 40% of the primary schools in the public of Ireland are multi-grade.

According to Kyne (2005) in Finland about 33% of primary school has less than 50 students where they are taught in multi-grade setting. In the year 2000-2001, there are 42% of the primary schools in Norway. In Australia, 25% of primary schools have multi-grade teaching and Greek has 31% of primary schools with multi-grade teaching (Kyne, 2005). Brozove, in Kyne (2005) is of the view that in the Czech Republic 35% of the primary schools operates with multi-grade classes.
Multi-grade teaching also exists in primary schools in Germany, Sweden and Switzerland. Konrzer (1985) describes that 80,000 students attend multi-grade schools Poglia and Strittmatter (1983) are of the view that in Switzerland about 23% of all classes were with multi-grade teaching. Juvane (2005) reported that in African Counties, all most all countries have this type of teaching. These countries include South Africa, Colombia, Burkina Faso, Uganda, Zambia and Fiji etc. (Berry, 2001, Veenman, 1995). In the USA the prevalence of multi-grade teaching is not more than 3% of the primary schools (Mason & Stimson, 1996). Multi-grade teaching is also prevalent in Australia where 40% of schools in the Northern areas are multi-graded and in Canada about 20% of the students up to class seven are taught in multi-grade schools (King & Young, 1996). Aikman and Pridemore (2001) are of the opinion that multi-grade teaching also exists in many parts of Latin America and Asia (Hargreaves, 2001). In India by 1996, 84% of the primary schools were multi-graded. There were three or less teachers taught up to grade 5th where they teachers were responsible to teach more than one grades. According to Ministry of Education and Higher education Sri Lanka (1999) 18% of the primary schools in Sri Lanka had multi-grade teaching where 4 or less teachers had been teaching from prep to grade 5.

According to Mansoor (2011) report, in Pakistan in the province of Sindh 65% of the primary schools have only two rooms available for different five grade which results in multi-grade teaching. More than 80% of primary schools in Northern area of Pakistan and Chitral in Pakistan are operating in multi-grade setting where two or three teachers have to teach from grade prep to grade five (Khan and Khan, 2004). The above mentioned facts prove that multi-grade teaching prevails worldwide, it is a common feature of primary schools in Africa (Juvane, 2005) but it is unfortunate that data on this phenomenon is insufficiently published and not systematically evaluated the world over.
2.4 RATIONALE BEHIND MULTIGRADE TEACHING

Shereen Abdel Razak Kamal (2010) states that there are many reasons and motivations behind multi-grade teaching in the recent time. There are certain circumstances and conditions under which many counties adopt multi-grade teaching as it become imperative for those counties. It is a fact that so many counties the world over struggle to achieve the desired goals to provide education for all (EFA) before 2015. They utilize multi-grade mode of teaching which is the most suitable for accessible area with small population and low enrollment rates. It is specifically beneficial for those girls who remain away from education due to cultural or socio-economic constraints. Multi-grade teaching is also helping in universalization of primary education which is one of the main Millennium Development Goals (MDGs) of the United Nations (Kamal, 2010) besides; many developed nations of world adopt multi-grade teaching for pedagogic reasons. Research and application have proved that this type of teaching enhances cognitive as well as non-cognitive skills of the students (Kamal, 2010). Brunswick and Valerian (2004) reported that multi-grade teaching is normally occurs as result of necessity. These necessities are described as under; Demographic or geographic restrictions such as scattered and less population density, declining of population as a result of migration of the people from rural to urban and urban to rural areas, inaccessible school in remote areas or administrative or pedagogical constraints such as leave or lack of teachers, absenteeism, low enrollment rate of students in higher grades and greater number of students in certain grade. Brunswick and Valerian (2004) are of the view that multi-grade teaching is very effective in emergency and conflict areas worldwide.
2.5 THEORITICAL AND PHILOSOPHICAL FRAME WORKS OF MULTIGRADE TEACHING

Bacharach et al (1995) point out that there are many theoretical and philosophical frame works existing about child education and child development that provide foundation for multi-grade teaching. These frame works comprise the theories of Bandura, Piaget, Erikson, Vygotsky, Bruner Bronfenbeemer and Montessori. These theories are discussed as follow

2.5.1 Bandura

Social theorist Bandura says that learning and development occurs through imitation, interaction with others, and observation. Bacharach at al (1995) are of the view that Bandura described the cognitive aspect of children’s learning as, a continuous reciprocal interaction between individuals and their environment multi-grade class rooms provide a multiplicity of opportunities for younger children to perform like older children. (Bacharach at al, 1995).

2.5.2 Piaget

According to Muthayan (1999) who states Piaget theory of learning in which he theorized that learning occurs through experiential and maturation process in a child. Children activity acquires knowledge through participation on their world and their interaction with other in that world. The imbalance situation leads to the accommodation of new concepts and thus knowledge is constructed. Multi-grade classrooms are composed of different age and grade of students and they perform different activities which stimulate experiential and maturational process in a child. Lodish (1992 : 22) is of the view children provide significant learning for younger children as they make effort to accommodate the more advanced understanding of their class fellow (Lodish, 1992).
2.5.3 Erickson

Bacharach (1995) pointed out Erikson suggestion that individuals face a number of social and psychological challengers at their developmental stages. Success or failure in resolving the psychological conflicts of each stage of development is determined by the individual’s relationships and by demands placed on them by society. Multi-grade relationships can serve to affect the resolutions of these stage conflicts.

Muthayan (2008) said that multi-grade teaching with different age level and grade, create greater opportunities for social challenges and physiological conflicts which provide opportunity to students to fall and find solution and then develop.

2.5.4 Vygotsky

Vygotsky described child’s development in his theory on the zone of proximal development as under.

The distance between the child’s actual developmental level determined by in depended problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978). Vygotsky states that multi-grade classroom is consisted of students of different level of understanding. In multi-grade classroom seniors can facilitate development by helping junior students in moving to the next level of understanding (Bacharad at al, 1995). According to Chapman (1995) the supporters of multi-grade teaching that Vygotsky theory can be applied in multi-grade classrooms, so that more able and older students perform as mentors of the less able and younger students(Chapman ,1995)

2.5.5 Bruner

Bruner is of the view that education should serve as a means of training well balanced
citizens for a democracy (Bacharach et al, 1995). Bacharadh et al further explains that for Bruner the student’s interest in learning is of great importance, and seeking of values and appropriate attitude about mental activity. Multi-grade classrooms encourage integrated curricula improves the earlier concepts as well as intellectual excitement and curiosity (Bacharach et al, 1995). It means that interaction between the older and the younger students may help the learners in learning of appropriate values, attitude and morals to become well balanced citizens.

2.5.6 Bronfenbrener

According to Bacharach (1995) Bronfenbrenner, theory explains multi-grade teaching as”, developments is the result of interrelationships of the child and all level of the society….. A necessary continuity between school and homes is made possible in a school setting that more represent diverse world, because of its diverse world. Because of its diversity, multi-grade classrooms reflect the real world. Tsolakides et al (2005) explain the view point of the constructers that learning occurs through social interaction.

2.5.7 Montessori

Montessori theory explains that the child’s stimulus is both for internal and external development. She is of the opinion that “…child’s real aim is to master his/her environment, finding means from the insight for the development”. (Montessori,1968). In multi-grade setting, it seems that the difference of ages contributes to stimulating, socially engaging, and rich environment which will promote child’s development. Montessori was optimistic about her opinion on vertical age grouping. According to Montessori (1988) it is inhuman thing to separate the children by age it stops the progress of social development of children. Multi-grade classrooms show that children of various ages assist one another. They communicate each freely and seldom find difference among themselves (Montessori, 1988). Lingam (2007) states that
scholar consider multi-grade teaching is the best practiced in such educational setting where students activity take part in their leaning and collaboratively work together.

**2.6 PREVAILING MODES (MODELS) OF MULTIGRADE TEACHING**

Pridemore (2004) argues that teachers in multi-grade schools feel difficulty to adopt mono-grade curricula for MGT, so in her research she tried to find out a possible pedagogy for multi-grade education. Pridemore (2007) identified four modes or models of curriculum for teachers to adopt any of them and attain the aims of multi-grade teaching. She also related these four curriculum models to the learning theories that inform the teachers and tried to build an understanding of a possible pedagogy for multi-grade teaching. These four curriculum models are Quasi Mono-grade Curriculum Model, Differentiate Curriculum Model, Multi-year Curriculum Cycle, and Learner and Material Center Curriculum.

**2.6.1 Quasi Mono-grade Curriculum Model**

This curriculum model has been adopted in many multi-grade settings, in this mode of curriculum, the teacher teaches or instructs one grade in mono-grade class while the other grades in the classroom work at their own or the teacher keep them busy in certain tasks (reading, memorizing writing). The teacher rotates after some time and give instruction to another grade. This process is continued until all the grades in the class are taught. Pridemore (2004) argues that this model is traditional one where the teacher is transmitter of knowledge, the teaching is teacher centered and the students are not encouraged to assist and collaborate one another. This approach is strongly based on Paiget theory of learning which stresses the role of physical maturation in cognitive development. (Pridemore, 2007). Little (2005) is of the view that in this strategy the teacher adjusts his / her time table in accordance with needs of the students, to some grades more time is given and to some grades less time is consumed. It depend upon the nature
of subject what her or she has been intruding. Multi-grade teaching is mostly prevailing in rural areas; therefore, the needs of rural people must be keeping in view while adopting the curriculum (Hargreaves, 2001). Joubert (2007) also suggests that in adaptation of curriculum the students individual differences must be addressed, it must be flexible to the needs of the students, the curriculum should be based/ focused on learning out comes instead of context achievement. It must be student centered rather than teacher directed and the role of teacher must be that of a facilitator.

Pridemore (2007) criticized that in quasi- mono-grade models, the planning of the classroom is very traditional and conservative. Quasi – mono-grade teaching model is time consuming. The work load for the teacher is heavy, he/she always struggle to complete the content prescribed in the given time. The assessment practices are probably more summative and traditional. This type of curriculum model does not develop independent learning among the students, because this approach is always teacher centered and mostly students do not find enough opportunities to develop independent learning.

2.6.2 Differentiated Curriculum Model

According to Vithanepathirana (2006) this strategy looks like an opposite of the quasi mono-grade curriculum model. In this curriculum model the teacher teaches / instructs theme/ general topic to all grades at the same time. This curriculum model is prevalent in multi-grade schools in Vietnam, Finland, and Sri Lanka. The teacher uses one theme for all grades at the same time. The beginning and end of the lesson is for the whole class, but the teacher can, in the middle of the lesson, differentiate and work with one specific grade. When the learners work at their own, they find opportunities for peer tutoring and self directed learning.

Pridemore (2007), Son, Pridemore, Nga, My, and kick (2002) Pridemore analyses this
curriculum model in terms of Berry’s five dimensions and agreed that the teachers planning must be good and he / she must spend a considerable amount of time before the lesson to plan which sections consist of general theme that can be taught to the whole class and which sections have to be differentiated and taught for a particular grade.

The teacher can assess the learners through both formative and summative assessment, when the work at their own, the teacher carefully plan assessment activities to keep the learners busy. In this curriculum models the grouping is important, the teacher moves around in the whole class teaching, group or grade teaching and even pair teaching. Differentiated curriculum model has the potential to develop learner’s interdependence and independence, but it is limited, and the teacher consumes most the time in direct teaching to the whole class.

2.6.3 Multi-year Curriculum Cycle Model

In this curriculum model the learners have to work in two consecutive grades through common theme / activities together. (Denial, 1988), but begin and end the curriculum at different times. Pridmore (2007) gives an example of grade three and grade four in a composite class. The teacher teaches the curriculum of grade four to both grades. At the end of the year the grade four is promoted to grade fifth and the grade three moves to grade four and the new grade three moves in. It becomes same combination of grade three and grade four. This year the teacher will work on the curriculum of grade three. When second years are completed the grade four covers the curriculum for both grades. Multi – year curriculum cycle means that the teacher instructs the same context for grades three and four but at different time. Pridmore (2007) is of the view that this model is useful in subject where there is no need to develop knowledge incrementally. However, in the subjects like mathematics and reading is not always possible, because the learners will have to acquire certain areas of knowledge before they continue. This model is very
suitable for cross-age learning, to encourage the teacher to integrate the context (Pridmore, 2007). Pridmore analyzed this curriculum model in terms of Berry’s five dimensions and is of the opinion that multi-year curriculum cycle model stresses the teachers to plan and identify common themes before going to teach the composite class. The teacher must have the expertise to group the learners in a number of ways because he/she has to group together students for same subject while separates them in other subject. According to Miller (1991) the organization of the class provides opportunity for the learners to work with different grades together and force them to become more self-directed learners (Miller, 1991). This model also encourages the learners with more knowledge to assist the learners who struggle and by doing so, they become more independent learners.

2.6.4 Learner and Materials Centered Curriculum Models

This curriculum model depends more on the students and the learning materials rather than the teacher input (Little 2005). Learning is constructed as involving a relationship between learner, learning materials and the teacher (Colbert, Chiappe and Arboleda, 1993). The students work on these materials at their pace with the support of teacher and complete the task. A well known example of this model is the Escuela Nueva program implemented in rural schools in Colombia. The Escudo Nuevo is considered as an ideal program for multi-grade teaching. Under this program the students receive a complete set of learning materials and they work on these materials at their own speed. This model is very successful (Colbert et al, 1993). It allows teacher to be very flexible and learners to work at own, practice revealed that they tend to come together in small groups to help each other. This model provides opportunity for the teachers to integrate context. This model has been adopted and utilized in countries like Brazil, Gyena, Chile and Uganda. Pridmore (2007) analyses this model in terms of Berry’s five dimensions and says
that planning and preparation of materials are the most important aspects. The model will fail if the materials were not properly planned and developed. Pridmore (2007) argues that schools must develop materials in advance so that it may be ready when the New Year commences. Development of materials is not easy and cheap because they require funds to develop the learning guides. The advantage of these materials is that, once they are developed can be used for so many time and places in multi-grade settings. This model certainly improves and strengthens the development of learner’s independence and interdependence, because the students are forced to work through the materials on their own time and speed and can form small groups, which can assist with the development of interdependence.

2.7 CONDITIONS FOR MULTIGRADE TEACHING

There are certain conditions that are leading to the adoption of multi-grade teaching worldwide. Brunswick and Valerian (2004) are of the view that when multi-grade teacher is adopted, it is always taken as a result of necessity such as geographic or demographic constraints like low population density, scattered population, declining population density resulting from rural to urban migration, schools situated in remote areas or it be adopted as a result of administrative or pedagogical reasons such as absenteeism, insufficient number of learners, lack of teachers, competition between schools that are seen by parents as being of unequal quality. In advanced and developed countries, multi-grade teaching is adopted for educational reasons and utilizes multi-grade teaching as an effective teaching strategy by innovative teachers both in private and government school (Brunswick and Valerian, 2004). Brown (2008) pointed out that multi-grade teaching has been commonly understood which occur as a results of shortage teachers, in such type of condition/situation, educationists are of the opinion that multi-grade teaching can play an important role if the goals of the world education for all are to be achieved,
affirmed in Jomtien in 1990 and the Dakar Frame work of action in 2000. (Brown, 2008b & Little, 2005). Most of the educational systems which face such situations adopt multi-grade teaching as a last resort because it becomes the only option and necessity to be adopted. Vithanepathirana (2006) is of the view that multi-grade teaching is not only adopted as a necessity but it is also adopted in certain educational systems deliberated, considering the advantages that can be drawn from multi-grade teaching. Little (2006) has given the example of English education system in England, multi-grade teaching is adopted in order to implement activity based child centered approach, and Vertical grouping was encouraged through which social integration among the different grades is improved. Tambulakani (2004) describes that the prevalence of multi-grade classes is due to its necessity rather than a choice because it gives access to education in remote and less populated areas, it increase access to learning in such schools where the number of teachers is in sufficient as compared to the number of students. Little (2005) explains the conditions under which multi-grade teaching happens, are described as under:

i. Schools situated in low population density population are widely

ii. Scattered, in accessible and low number of students. Schools may home only one or two teachers responsible for teaching all grades.

iii. Schools that contain a cluster of classroom spread across in different location, in which some classes are multi-grade and some are mono-grade for some reasons or others. Some teachers with in the same school spend most of their time with multi-grade classes, some with mono-grade classes.

iv. School in areas where the student and teacher number are declining and where previously was mono-grade setting.
v. Schools in which the number of students admitted to a class exceed official norms on class size, necessitating the combination of some students from on class grade with students from another grade.

vi. Schools in areas of population growth and school expansion, where enrollment, in the expanding upper grade remains small and inadequate number of teachers.

vii. Mobile schools in which one or more teacher move with nomadic and pastoral list students spanning a wide range of ages and grades.

viii. Schools in areas where parents one their children to more popular schools within reasonable travel distance, leading to a decline in the potential

ix. Population of students and teach in the less popular school.

x. Schools in which teacher absenteeism is high and supplementary teacher arrangement is not effective.

xi. Schools in which the official number of teachers deployed is sufficient to support mono-grade teaching, but where the actual number deployed is less for some reason or other.

xii. Schools in which students are organized in multi-grade rather than mono-grade groups, for pedagogic reasons, often as part of a more general curriculum and pedagogic reform of the education system.

Little (2005) further points out that condition(x).under line a distinction between multi-grade teaching that arises through necessity and choice conductions (i-ix) arise through necessity only. Condition (i-vii) is the necessities arise from the characteristics of students while condition (vii-Ix) reflects the characteristics of teacher. Condition (x) is different from all mentioned conditions above and it is taken as a choice by teachers or policy makers to improve the quality of teaching and learning. This unfortunate since the conditions that give rise to teaching and
learning in multi-grade situation will themselves have an impact on the quality of teaching and learning transactions (Little, 2005). In other words, if the number of students in a class group is very large and the number of teachers is less, than parents and teachers will understandably demand for more teachers. In such conditions, it is unlikely that a multi-grade pedagogy, however transacted, will be effective since it is not the pedagogy of choice. However, if a multi-grade pedagogy has been selected by the teachers of a school, in consultation with parent, and if the class size is perceived to be reasonable than the quality of the transaction within the classroom will likely to be more effective. Vithanepathirana (2006-5) argues and highlights different cautions, indicating, for example that in educational setting whether multi-grade teaching is adopt by necessity, the quality of multi-grade practices are often poor and not as good as normal. Little (2006) is of the view that only few education systems have managed to transform it necessity into and effective and positive teaching approach.

2.8 EVIDENCE ON THE IMPACT OF MULTIGRADE TEACHING

2.8.1 Effects of Multi-grade Teaching on Students’ Performance

According to Combrinck (2011) regarding the impact of multi-grade teaching on Students’ performance, so many studies have been conducted in the past. Previous research identified more positive correlation non-cognitive skills as compared to cognitive ones (Kamal, 2010). Little (2001) has reviewed many studies on multi-grade experience over the last 15 years, including Pratt (1986), Miller (1991), Veenman (1995), Mason and Burns (1997) and Esuela Nueva Program in Colombia. The results of these studies show an interesting insight into teaching in multi-grade setting. These studies mostly compare cognitive and Non-cognitive achievements of students in multi-grade setting with the Performance of students in mono-grade teaching. These studies indicate that there is no main difference between the achievements of
multi-grade teaching and mono-grade teaching. However, the non-cognitive achievements show that students in multi-grade classroom attain higher outcomes than those of mono-grade classrooms. For example, students from the Esuela Nueva schools attained higher scores in creativity and Self-esteem (Combrinck, 2011). Berry (2006) is of the view that in Togo and Burkina Faso on multi-grade teaching found that students in both countries outperformed students in mono-grade teaching. Lungwangwa (1989) supported this result who conducted a study on the impact of a pilot multi-grade education in Zambia. He found that students performance in multi-grade setting.

Miller (1991) reviewed 13 quantitative studies, to find out achievements differences of students in multi-grade and mono-grade teaching, most of the indicated little or more achievements differences. Dever (1994) is of the view that younger students in multi-grade setting outperform as compared to mono-grade teaching. Through Vygotsky’s Zone of Proximal development theory, children getting peer assistance and stretch their knowledge beyond their individual level. Brown and Martin (1989) are of the opinion that a comparative study of students on multi-grade and mono-grade in Eight-New (a city). The multi-grade students were not significantly different from mono-grade students in grade points or total achievement test. According to Thomas and Shaw (1992) the World Bank report shows that students in multi-grade setting in Pakistan performed 30% worse on achievement tests than mono-grade students and multi-grade schools indicated higher rate of repetition. Veenman (1995) collected evidence of 45 studies concerning cognitive and non- cognitive effects of multi-grade teaching, drawn from different nations and countries worldwide, both developed and developing countries, according to Veenman, there was no significant difference in students’ performance between multi-grade and mono-grade classes. The overall medium effect size for cognitive outcomes was
0, while the overall median effect size for non cognitive outcomes was +0.10. On the basis of findings Veenman concluded that:

Parents, teachers, and administrators have no need to worry about the academic progress or social-emotional adjustment of students in multi-grade or multiage classes. These classes are no simply worse, nor simply better than mono-grade classes” (Veenman, 1995). Veenman(1995) proposed four factors to explain the findings of no difference in students achievement between multi-grade and mono-grade teaching. These factors are described as under:

i. Teachers of multi-grade teaching are not fully prepared for teaching in such classes and do not have relevant teaching materials available for their teaching.

ii. Grouping alone is unlikely to have an effect; learning is more dependent on the quality of teaching than an organizational structure.

iii. Bias in selecting more capable students into multi-grade classes, if it occurs, would lessen the proportion of these students in mono-grade classes, producing nonequivalent sample for comparison.

iv. Multi-grade setting is demanding and leaves teachers with little energy to pursue potentially more effective grouping strategies in their teaching, resulting in the use of the same practices as in mono-grade setting.

The strength of the quality of the research reviewed by Veenman was not consistent, the justification for inclusion of some of his analysis was doubtful. Mason and Burns (1996) reviewed the research on effectiveness of multi-grade and mono-grade teaching, they agreed Veenman’s findings of non significant differences in achievement, and a little more positive though no significant social-emotional effects of multi-grade teaching. However, their
conclusion was different; they claimed that multi-grade classes have slightly negative effect. Mason and Burns (1996) were confident that the reason must lie in the more complex and difficult teaching conditions of multi-grade of multi-grade situation, for example, overload of work, better management skills, and need for more preparation, time, results increase in teachers mental pressure. Russell, Rowe, and Hill (1998) are of the view that less effective teaching is characterized by less instruction time per grade level group, lower quality, less time to assist individual students and meet their needs, and reduce curriculum coverage, particularly, in areas beyond basic skills, that is why, Mason and Burns expected differences in multigame and mono-grade students achievement. Russell, Rowe, and Hill (1998) further investigated possible explanation for the occurrence of effects or no effects, and the process involved in creating these effects and no effects of students’ achievement in both types of classes. They assumed following three areas of investigation would help in providing such insight and understanding:

i. The formulation of multi-grade classes.

ii. Teaching practices in multi-grade classrooms.

iii. Parents, teachers, and school leaders’ attitude toward multi-grade classes.

But these assumptions were never tested.


2.8.2 Productive personal and social effects of multi-grade teaching

In the context of affective domain of students, the case of multi-grade teaching situation appears much stronger than mono-graded classrooms. Pratt (1986) reviewed 15 studies that children’s friendship, attitude, self-concept and altruism to school. He claimed that overall,
socio-emotional development of students in multi-grade classes are either accelerated or showed no difference, when it is compared with mono-grade classes. Little (2005) also identified in her review of studies from UK and US reports positive and negative findings on the maturity of friendship patterns, on personal and social adjustment, reduction of anxiety level, and positive findings on self-esteem, self-concept and attitudes to school. Little (2005) is of the opinion that in developing countries, the social effects of learning in multi-grade teaching are very few indeed. Colbert, Chiappe and Arboleda (1993) indicate positive effects on self-esteem and civic behavior in the Escuela Neuva program in Colombia. Psacharopoulos, Rojas and Velez (1993) confirmed the positive effects for civic behavior but not for self-esteem. A UNESCO/APIED study from 12 countries in the Asia and Pacific region describes four advantages of multi-grade teaching, which are not concerned cognitive learning. They are:

1. Students tend to develop self study skills and independent work habits.
2. Cooperation between different age groups are more common, resulting in
3. Collective ethics, concern and responsibility.
4. Students develop positive attitude by helping each other.
5. Remediation and enrichment activities can be more discreetly arranged than in normal classes.

The above mentioned advantages are not graded in systematic study, yet they suggest a kind of non-cognitive effects that can promote a well-organized multi-grade classroom and may be the evidence to justify multi-grade teaching in schools.

2.9 INSTRUCTIONAL STRATEGIES IN MGT

Kyne (2005) argued that instructional strategies play an important role in improving the quality of teaching and learning in multi-grade classroom. The teachers utilize various types of
instructional strategies in multi-grade teaching, Kyne (2005) suggests independent learning and cooperative learning, and these approaches increase the level of understanding of the students. Little (2001) is of the view that these change the role of the teacher from informatory to facilitator. The facilitator roles make sure that the teacher uses time productively in the classroom. Kyne (2005) suggests three strategies are to be effective in multi-grade teaching. These included (i) peer instruction in which students act like teacher for one another, (ii) cooperative group work in which small groups of students work collaboratively on a given task, and (iii) individualized learning in which students are involved in self study. Apart from above suggested instructional strategies, thematic teaching, various group technique, self-directed learning, team teaching and the use of learning centers in the classroom are also effective strategies utilized in multi-grade teaching. They are discussed as under

2.9.1 Thematic Teaching

Thematic teaching is a useful strategy that specially utilized in multi-grade settings. In thematic teaching, the teacher assembles all the students of different grades and ages and integrates the curriculum for teaching at the same time, Bacharach (1995) points out that thematic teaching in multi-grade teaching permits the students to share the common concept and allows each child to work on that concept at his level.

2.9.2 Grouping Techniques

Chapman (1998) explains that teachers use various types of grouping techniques such as cooperative learning, whole class and small group work. The combination of various types of groupings for different purposes is the best thing to do (Chapman, 1998).

(a) Cooperative Learning

According to Veenman (1995) cooperative learning is one of the best strategies used in
multi-grade teaching. In this type of teaching and learning approach, the students work together on the assigned task, each student participates actively. Students complete the task without guidance and supervision from the teacher. Cooperative learning strategy is increasingly used for developing higher order thinking and promoting pro-social behavior. Research shows that in cooperative learning heterogeneous groups are especially useful for low achievers. (Cohen, as quoted in Veenman, 1995) Cooperative learning technique enables the teacher to manage his multi-grade class more effectively. Every child in the group has a designed task and they complete the task jointly. Cooperative learning enables the students to be interactive, interdependent, develop team building skills (Johnson and Johnson, 1994).

(b) Whole Group Teaching

In multi-grade settings, it has been seen that the teachers arrange whole group teaching, the teacher gather all grade together and introduce a lesson of a common theme to the entire class (Muthayan, 1999). If the younger students not fully understand the theme, they are assured that the same theme will be taught again the next year and added that it will find it more interesting. According to Muthayan (1999) grade 2’s are that part of the whole group but they are not assigned work while the higher grade have to do the assigned work on the instructing whether in small groups or individually, Muthayan (1999) is of the view that in whole group teaching the teacher assign seat work for the students and this technique allowed him/her to more Freely around the class and instruct small groups or individuals. Whole class teaching technique is very suitable for teachers because it saves time for them.

(c) Small Groups

Small groups’ technique is a part of the whole group teaching. The students of different grade are sat together in small groups, the students work on tasks specific to their grades but the
students, of different grade discuss their work with one another each time in small group the older students assists the younger students. In multi-grade teaching the teachers utilize a variety of teaching strategies because there in no one best strategy to be adopted. Teachers use different strategies according to needs of the children and the context in which learning occurs. McClellan is of the view that increased opportunities for children who are very different from one another by age to socialize and work together deepen and enhance the effectiveness of educational environment and strategies (Muthayan, 1999).

2.10 ISSUES AND CHALLENGES OF MGT

The teachers have to face a number of challenges while teaching in multi-grade setting. UNESCO (2007) report indicates towards the following challenges in multi-grade education:

i. Lack of teachers training.
ii. Inadequate teaching materials.
iii. Inflexible curriculum.
iv. Non-availability of school facilities.
v. In-sufficient incentives for the teachers.

Titus (2004) pointed out the challenges of human resources; infrastructure and materials in South African counties the teachers are untrained or trained only for mono-grade teaching (Barrett et al, 2007, Chiu and Khoo, 2005, Hanushek and Wobmann, 2007). The teacher trained for single grade is given the responsibility to teach in multi-grade setting. White and Reid (2008) are of the view that the training of the teachers should be in accordance with the place and realities of the situation where the teacher has to teach. About 80% of the primary schools in Chitral are working in multi-grade setting, where two or three are teaching to six classes. These teachers have obtained primary teachers certificate (PTC) from elementary colleges or Allama
Iqbal Open University (AIOU), Islamabad but they are not trained to teach in multi-grade situation (Khan & Khan, 2004). Jalal Wali Khan and Sultan Ali Khan (2004) further explain that it is strange that these teachers are trained only for single grade classes but they are compelled to teach in multi-grade situation, where the teacher divides 35- 40 minute time for two or three different grades. The teacher is busy with one grade while the other grades are setting idle or busy in their own work /activities (Memorizing, writing etc). The curriculum is distributed month wise or the whole year. (Khan & Khan, 2004). According NWREL (2001) it has been acknowledged that multi-grade classes face more challenges than traditional single situation. Collingwood (1991) indicates the challenges of multi-grade classrooms worldwide that most countries have human, structural, and material problems such as:

- Reduced instructional time for teachers, Curriculum materials are designed only for one year, Inadequate self instructional material, Lack of pre and in service teacher training required for multi-grade situation, Wide range of abilities and interest levels in one classroom, Exam pressure, which compelling teachers to focus on exam classes only, A large number of students in the classroom and shortage of teaching and learning resources (NWREL, 2001).

Berry and Little (2005) reported the following challenges faced by multi-grade classrooms:

i. The structure of national curriculum and related expectation of

ii. Curriculum coverage and assessment or achievement targets.

iii. The range of abilities of the students in multi-grade setting where students have been assigned on criteria other than ability homogeneity.

iv. A pressure to prepare students for internal assessment. Structural issues are common in British system where multi-grade teaching is practiced.

Passion (2002) highlighted different challengers of multi-grade situation and suggested
following solution to the problems:

i. Provide special treatment for multi-grade classes by creating a unit within the
department of education dedicated to develop such classes.

ii. Special legislation should be made for multi-grade teaching.

iii. Special measure should be taken for facilitation, teacher training, and assessment of
teaching strategies or approaches.

iv. Grant or special funds should be provided for multi-grade setting in order to improve
teacher performance.

Doyle and Rice (2002) are of the opinion that the research evidence on the significance of
community members and local stakeholders in multi-grade teaching is not encouraging. Little
(2001) also second the opinion of Doyle and Rice by saying the isolated nature of multi-grade
teachers in their classrooms is well documented (Little, 2001). Cornish (2006) argue that
teachers find it hard to gain the support of parents. Parent’s perception about multi-grade
teaching is commonly reported as negative. Parents are the basic stakeholders in education of
their children. They have the following concerns with multi-grade teaching (Cornish, 2006):

1. A large number of parents do not believe in management and teaching of multi-grade
classrooms.

2. Many parents are of the opinion that some grades and some children are more suited than
others to being part of multi-grade classroom.

3. Many parents are concerned about the practices of putting students of different ages
together.

4. Parents are anxious about cohesion both within the class (Class identify) and with grade
peers in mono-grade classrooms (grade identified).
5. Parents question perceived choice (Between multi-grade and mono-grade classes) and selection bias.

Keeping in view the last point, Cornish (2006) is of the view that bias selection of teachers or students has both positive and negative effects. Parents think that when better teacher are selected from mono-grade and place in multi-grade classes, the selection will have positive effect on multi-grade classes but it will have negative effect on mono-grade classes. Little (2001) argues that it is a fact that multi-grade teaching is not a well known practice in schools, but this does not explain their behaviors in all cases. Cornish (2006) observed the need for an inclusive management arrangement to support multi-grade teaching, arrangement and structure in schools. This perspective favors the claim by Little (2005) that for children to learn effectively in multi-grade settings, teachers need to be well trained and supported, well resourced, and have positive attitudes towards multi-grade teaching. Multi-grade teaching has lack of best practice of effective teacher support modes in literature. How can these models be applied is of low standard. Several studies have directed attention on challenges faced by the multi-grade setting for teachers and their teaching tasks. In developing countries studies show negative perception of teachers about multi-grade teaching and multi-grade classes (Little, 2005). Suzuki (2004) points out that in the Nuwakor and kavre districts of Nepal, 50 out of 56 teachers with experience of multi-grade teaching faced more difficulties than mono-grade teaching. Little (2005) is of the view in Peruvian Amazon that teachers like to teach in mono-grade setting as compare to multi-grade setting. They are not ready to teach in multi-grade classrooms because the children do not “get the same” as in mono-grade classes and they are of the opinion that they have not enough teaching materials to support their learning in multi-grade setting (Little, 2005). In rural areas and poor communities, teachers serving in multi-grade schools have negative attitude toward
multi-grade teaching (Ames, 2004). According to Vithanepathirana (2006) in Sri Lanka, the attitude of multi-grade teachers is generally negative toward multi-grade teaching. But a recent action research shares idea that teacher’s attitude become positive towards multi-grade teaching when they realize that there are strategies that can be used to lessen the teachers’ burden of intensive lesson planning for several grades and to improve student’s achievement outcomes. In Turkey and Caicos Islands, teachers in multi-grade schools also have negative perception about multi-grade classrooms. They complain for the burden of lesson planning required for multi-grade classrooms (Berry and Little, 2005). Little (2005) mentioned several other challenges faced by teachers from earlier students, related to rural and remote areas where multi-grade schools are situated. These include:

1. The absenteeism of teacher in rural areas.
2. Non filling of vacant posts in multi-grade school in remote areas.
3. Inattentiveness of education officer to fulfill the needs of multi-grade schools.
4. Insufficient provision of houses to live in, employment for wives and children’s education.
5. Lack of opportunities for in service training.
6. Lake of special financial in centuries for teachers teaching in rural and remote areas.
7. Absence of promotion incentives.

Joubert (2005) also argues that in African counties the perception of the teachers is the same as Sri Lanka and Nepal. While successful teaching efforts can make differences in students learning in all teaching context or regardless of the subject areas (Hargreaves and HO, 2000)

2.11 ADVANTAGES AND DISADVANTAGES OF MULTIGRADE TEACHING

Little (2006) is of the opinion that so many educationists are in favor of multi-grade
classes, but a large number of educationists are not in its favor. Many feel that multi-grade approach provide opportunity of access to education in scattered population and rural areas, but teachers are also of the view that integration of curriculum, teaching in multi-grade setting, individualizing instructions, and inadequacy of teachers are the basic problems of multi-grade teaching. Even, the parents have also negative perception about multi-grade teaching. However, lack of understanding and lack of personal attention are the main causes of these phenomena.

2.11.1 Advantages of Multi-grade Teaching

i. Multi-grade teaching provides opportunities to learners for basic education in rural areas.

ii. They are also an efficient means of using less educational input, such as trained teachers, classrooms, and materials.

iii. Multi-grade schools maintain the village identity and cultural life.

iv. In multi-grade setting students can achieve higher achievement

v. Levels especially in mathematics, language and science.

vi. Students in multi-grade setting are found to be more obedient as compare to mono-grade students show significant gain in reading and language(Logue, 2006)

vii. Multi-grade schools provide opportunities of education to girls in villages because those schools are located closer to home.

viii. Through independent query and peer tutoring, students “learn to learn” and “learn to teach”.

ix. Teachers and individual students develop a strong relationship with passage of time which helps the teacher to access the student and adopt different instructional strategies required.

x. Creates caring environment as a result older students help the younger ones and thus
social interaction improve among the students (Frosco, 2004).

xi. The stigma associated with repetition is washed.

xii. Multi-grade grouping has positive effect on student’s attitude and behavior, without loss of academic achievements.

xiii. Multi-grade system provides natural environment to students for play and project.

xiv. Normally, in multi-grade classes’ age and achievement differences are accepted by the students.

xv. In this situation the students land to integrated curriculum.

xvi. Children are able to work at different developmental levels without obvious remedies, thus, avoiding emotional or social damage caused by retention.

2.11.2 Disadvantages of Multi-grade Teaching

Thomas and Shaw (1992) have also described some disadvantages of multi-grade teaching. They are as under:

i. If properly trained teachers and required resources were not provided, students’ achievements may fail.

ii. Demands on teachers’ time and organizational capabilities are high; they need special training and perform their duty effectively.

iii. Students may get less individual attention and often work independently.

iv. The teachers have to teach more than one grade at the same time and they have completed the entire curriculum in the stipulated time, which is practically very difficult.

v. Teachers always feel lack of time for teaching the required contents.

vi. Teachers feel over burden in multi-grade classes and over burden create lack of interest among them.-In multi-grade situation teachers have lack of classroom management skills.
vii. Inappropriate teaching and learning materials also affects the academic achievement of the students.

viii. Pratt and Treacy (1986) are of the opinion that more time is needed for Preparation, making of tests, and programming, for teaching. No enough time is given to individual attention of students and activities the whole day. The teachers in multi-grade classes have to teach the curriculum of mono-grade, thus, the teacher in mono-grade setting feel relaxed as compare to multi-grade because the teachers in multi-grade have three times more burden than that of mono-grade teaching.

2.12 PROFESSIONAL DEVELOPMENT NEEDS OF TEACHERS WORKING IN MULTIGRADE TEACHING AND LEARNING CONTEXTS

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. The required skills and behavior of the teachers are different, and coordinating activities are more difficult (Lingam, 2007). 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 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 a lack of effective implementation of methodology. As a result, the curricular requirements in multi-grade schools suffer; teachers have no theoretical background on how to teach multi-grade classrooms; in most of the subject classed multi-grade teaching is taught. (a) There is a lack of methodological approach concerning the use of new technologies assist teaching in multi-grade schools. (b) There is lack of continuous training and support for teachers. (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 teacher. The need analysis survey was conducted across four European countries; Finland, Greece, Spain, and UK. The main aims of the studies were to present the existing situation with respect to multi-grade schools, their problems 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: (a) General issues. (b) Curriculum issues. (c) Preparation for multi-grade school teaching. (d) Methodological didactical issues. (e) Student’s grouping issues. (f) Cooperation with local and educational authorities. (g) Working issues. (h) Social and cultural issues. (i) Training program issues. (j) The role of ICT. (k) Infrastructure. (l) Admonition/time management. (m) Multi-grade teachers have professional needs in each of the above mentioned areas. Twelve teachers from eight multi-grade schools in rural areas in Northern Finland, where each school had 2-3 teachers and the number of students were. (n) Between 30-70 (Tsolakidis et al., 2005) had the following specific needs. (o) They often felt isolated from other teachers. (p) They noticed that their work was professionally very demanding. (q) When new nationwide curriculum was introduced, they wanted to support to understand it and to introduce this curriculum into their multi-grade schools. (r) Computers were already utilized in the classroom, teachers wanted to learn about it and to make use of these computers. (s) They felt that one of the greatest pedagogic challenges in multi-grade classroom was differentiation and individualization of teaching.

Tsolakidis et al (2005) stated that in Greece, data was collected from 900 multi-grade schools through MUSE Questionnaire. The survey revealed the following specific needs:

1. Teachers felt that the curriculum taught in multi-grade school was neither
differentiated nor adjusted to the need of multi-grade classroom. They faced problems

2. With the distribution of time and with the volume of work.

3. The main teaching methods utilized were collaborative learning and silent assignment.
   They realized that they needed good example of implementing these methods in real and not ideal conditions.

4. The teachers had not sufficient time to complete the teaching of main subjects, which had negative effects on the less important subjects to which they gave less time or did ‘t teach at all.

5. Teachers were of the opinion that multi-grade teaching caused inability to cope with extra work and extra pressure.

According to Tsolakidis et al (2005) in Spain, the teachers had a number of needs. Most of the needs were non-professional and criticized the situation in which they work. These needs and concerns were as follow:

i. Physical and cultural isolation;

ii. Unification of methodological criteria in classes.

iii. The need for a more positive evaluation of their work by local community.

iv. More training, introduction of cross-curricular or transverse subjects including academic content values, personal development etc;

v. Lack of resources.

vi. Ways of grouping of children of different levels.

vii. Physically and psychologically demanding work for the teachers.

viii. Poor infrastructure and lack of equipments.

ix. Temporary nature of staff, due to the high level of mobility that make continuity in the
work with the students and the development of a curricular plan.

x. Teachers not prepared for the rural schools.

xi. Difficulty in completing the official curriculum the need for flexible approach to educational inspection.

xii. The need for continuous professional development in particular for new teachers.

xiii. Difficulty in team work in grouped rural schools.

There is a diversity reflected in the needs of multi-grade teachers above. Multi-grade teacher needs analysis is paramount in the design of training programs to support teaching in multi-grade contexts (Tsalakidis et al, 2005). There are very few studies about the analysis of the professional development needs among multi-grade teacher in developing countries. Joubert (2007) is of the view that national government in Africa require all teaching to follow the national curriculum but the application of a mono-grade teaching national curriculum in multi-grade teaching situation is creating problems for multi-grade teachers. This finding suggests that multi-grade teachers need to be supported in ways to implement the program. Daniel (2004) is of view the opinion that in Africa, multi-grade teachers need to know how to structure mono-grade syllabi to suit in multi-grade situation. They also need to know issues of time management and work load planning. The conceptual and skill requirement of the prescribed curricular that multi-grade teachers in Africa are implementing, are higher than the conceptual are unable to cope (Juvane, 2005). Miller (1989) is of the view that multi-grade teachers have specific needs and their training must be conducted according to these needs. Miller (1989) identified the following issues faced by the teachers in multi-grade classrooms:

i. The training needed to teach in a multi-grade classroom.

ii. The effect of multi-grade instruction on student’s performance.
iii. Classroom management and discipline.
iv. Classroom organization.
v. Instructional organization and curricular.
vi. Instructional delivery and grouping.
vii. Self-directed learning.
viii. Planning and using peer tutoring.

Multi-grade teachers need to understand and have to their disposal the basic concepts and principles classroom layouts, instructional strategies, and teaching materials for multi-grade teaching (Miller, 1989).

2.13 EFFECTIVE PRACTICES FOR MULTIGRADE TEACHING

The literature suggests that there are five key aspects of which are generally the focuses of training packages for multi-grade teachers. These aspects contain:

2.13.1 Classroom Management Techniques

Multi-grade classrooms comprise more than one grades therefore, it is difficult for a single teacher to manage it (Juvane, 2005). This suggests that the class teacher must be skilled in managing instruction to reduce the amount of ‘dead time’ during which children are not productively engaged on task. According to Kyne (2005) the teacher must be aware of different ways in which the children are grouped together, the importance of independent study areas where students can go when they have finished their work, and approaches to record keeping which are more flexible as compared to the single-graded classroom. Keeping in view the above, Berry (2004) is of the opinion that students also have a responsibility in the process of multi-grade classrooms management students need to be taught the value of independence and cooperation, and this can be done by involving the students in classroom decision-making. This
suggests that in national culture and education systems where little or no value is given to values such as independence or cooperation, achieving effective multi-grade teaching could be a challenge, regardless of the subject area and students involved.

2.13.2 Instructional Strategies

Kyne (2005) investigated that that instructional strategies play an important role for the improvement of the quality of instruction in multi-grade teaching. The promotion of strategies that increase the level of student independence and cooperative group-work tend to be suggested. Little (2001) implies that these involve a change in the role of the teacher from ‘giver of information’ to ‘facilitator’. This suggests that the widely practiced approach of the teacher being a transmitter of knowledge requires reconsideration. Kyne (2005) is of the opinion that facilitator role ensures that time spent away from the teachers is spent productively. Kyne (2005) suggests three important strategies for effective teaching and learning in this regard

i. Peer tutoring, in which students act as teachers for one each other.

ii. Cooperative group work, which involve small groups engaging in collaborative task, and

iii. Individualized learning programs involve the students in self-study (Kyne, 2005).

The above mentioned perspectives suggest that effective multi-grade teaching need new and different strategies as compared to mono-grade teaching.

2.13.3. Planning for Curriculum

According to Little (2001) in most of developing countries, mono-graded curriculum is followed. Teachers make use of materials that are oriented for mono-graded classrooms, which put severe pressure teachers in multi-graded schools. Juvane (2005) and Little (2005) are of the view that each set of grade-level materials are typically placed in a separate booklet, which may include specific content to be taught, as well as guidelines on how to teach it. Such curricula are
difficult for multi-grade teacher to teach because; they tend to require plans to be written for each grade-level separately. Moreover, Raj (2014) describes that there is no time for teachers to design such curricula and to re-design national requirement to fit local contexts. Ames-Ramello (2002) investigated that using multi-grade curricula in multi-grade situation is not only time consuming but also results in ineffective teaching and learning process. Brown (2008) also stated that the application of mono-grade curricula in multi-grade classes create problems for the teachers. Brown (2008) points out that such curriculum is generally not structured for multi-grade classroom; it places a heavier workload on multi-grade teachers as compared to mono-grade teachers; impedes the capacity of multi-grade teacher, given the lack of facilities and problems of management at the local level, and it does not provide opportunity of time for the required preparation of teachers and to address students’ needs. Brown (2008) is of the opinion that multi-grade teaching classes need to be developed a specific syllabus. Ames-Ramello(2002), Kyne (2005) and Little (2001) are of the view that teachers need to be taught how to plan grade-level objective, or how to amend the curriculum to make it more suitable for multi-grade teaching situation. The literature points out four curriculum adaptation strategies for effective multi-grade classrooms and could be promoted during teachers training (Brown, 2008; Little, 2001, 2005). These curriculum strategies are as:

i. Multi-year curriculum span, in this strategy units of curriculum content are spread across more than one grades. All students work through common topics and activities(Little, 2005)

ii. Differentiated curriculum, it covers the same general topics or themes with all students and allow them to be engaged in learning tasks appropriate to their level of learning.

iii. Quasi mono-grade curriculum, it enables a teacher to teach grade groups in turn, as if
they were mono-graded. The same or different subjects are taught at the same time and the teacher distributes the time as suits to him/her, according to the situation.

iv. Learner and materials centered curriculum, it depends upon the students and the learning materials than on teacher input (the curriculum is translated into self-study graded learning guides). Students work these at their own pace with support from the teacher and structured assessment task. Learning is constructed as involving a relationship between students, teacher and learning materials.

v. Joubert (2007) is of the opinion that the adjustment/adaptation of the curriculum should recognize the following:

   a. Pupils may develop at different rates.

   b. More flexible approaches to student retention and promotion are needed.

   c. There should be a focus on learning outcomes rather than content.

   d. Learner focused rather than teacher directed methods are beneficial.

   e. Teachers should be trained to be facilitators rather than keepers of knowledge (Joubert, 2007).

2.13.4. Instructional Materials

Instructional materials also tend to be written for single-graded classroom. Consequently, they are produced as grade-level textbooks and are designed to be delivered by the teacher to the students (Kyne, 2005). Little (2005) describes that evidence suggests that such materials are ineffective in multi-grade teaching. According to Little and Pridmore (2007) materials found to be more suitable include a self-study element, which might be in the form of workbooks with self-correction key, or a small classroom library that can be assessed independently by the students. Furthermore, the literature implies that teachers need to be shown how to produce such
self-study materials in a cost effective way (Little and Pridmore, 2007). But materials relevant for one country may not be appropriate for the other. Birch and Lally (1995) indicate several examples of materials developed in Asia and the Pacific. The knowledge base on the nature of the learning materials used in, or how they are developed for multi-grade classes.

2.13.5. School and Community

Sharma (2011) is of the opinion that a community is an informal and active agency of education. It can play many roles in the promotion of education. These roles include: (i) increasing attendance in schools (ii) financing of education (iii) maintaining good atmosphere in the schools (iv) Catering physical facilities, and (v) providing media of informal education. Mkhabela (2011) is of the view that all communities value education in their children. Education is one of the public good; therefore, a community must protect and preserve it. It should be used as a tool for social development. Nasir (2012) states that extensive research has proved that there is a strong link between community participation in school and excellent school attendance along with improved academic achievement of students. A sincere and committed community can arrange a lot of facilities for educational activities. It can provide free teachers, financing, space, instructional materials, and help in administration. It can check absenteeism of both teacher and student, increase enrollment of students and improve academic achievement of a school (Nasir, 2012). Juvane (2005) is of the opinion that multi-grade schools are mostly situated in remote and difficult to reach areas. They are often far from the educational centers and receive little pedagogical support (Titus, 2004). Titus investigated that the communities in which multi-grade schools are located often do not see the value of education and often speak different language from the” official” one of the school. Therefore, Titus (2004) recommends the involvement of community in the life of the school as a strategy to build tie with the school, and implies that
parents can be asked to visit schools as a resource or the school might extent the curriculum out into the community. The teachers are needed to be trained in approaches that would help them to develop relationship between the school and community (Titus, 2004).

2.14. TEACHER PREPARATION FOR MULTIGRADE TEACHING

Studies conducted on multi-grade teaching, generally report the lack of preparation of teachers for multi-grade teaching (Kyne, 2005; Lingam, 2007; Little, 2005). Little (2006) is of the view that in many countries, teachers training programs continue only to train teachers for mono-grade classroom. The evidence suggests that teachers are not trained in multi-grade teaching, but merely oriented (Vithanapathirana, 2006). Issues related to epistemology which provide conceptual tools to guide teachers to navigate the new pedagogy have been under-emphasized. This has hindered the practice, as well as, teachers’ conceptual development, creative thinking, innovation, and imagination. Little (2005) found that pre-service and in-service teacher training on the needs of the multi-grade teaching is vital. Lingam (2007) and Mason & Burn (1997) are of the opinion that for effective teaching in multi-grade classrooms, the teacher must be better trained. Chandra (2004) also emphasized the ongoing professional development of multi-grade teacher so that they must be able to lead not only in pedagogical techniques but also in school curriculum and communication techniques. Pridmore (2004) investigated that in some countries like Finland, multi-grade teaching is already included in teacher education curricula and for Asian countries like Vietnam, multi-grade teachers are trained to give different lessons at the same time to students of different grades. In Sri Lanka, three specific modules on multi-grade teaching for multi-grade teachers are included in the teacher program and teacher education.

Module 1: The context of multi-grade teaching; Reflecting on the challenges and needs analysis.
Module 2: Learning and teaching of mathematics in multi-grade/ multilevel setting: Adopting a student and materials centered approach (Vithanapathirana, 2006). The same kind of program to the one in Srilanka was also introduced in Papua New Guinea (DoE, 2001). Little (2005) is of the view that in England, multi-grade teachers express the desire for in-service training and curricular support for multi-grade classroom, but generally have to rely on their training in the principles of diversity and differentiation to manage the demand of multi-grade classroom. Multi-grade teaching is not specifically addressed in teacher education programs in the majority of African countries (Joubert, 2007; Juvane, 2005). This suggest that during pre-service training, neither theoretical nor the practical component of the program included aspects concerning to multi-grade teaching. According to Little (2005) there are many examples worldwide of ad hoc teachers training programs to meet the needs of multi-grade teaching; many of them supported multilateral organization.

2.15. ASSESSMENT SYSTEM IN MULTIGRADE TEACHING

There are many purposes of educational assessment in multi-grade teaching. The foremost purpose in most of the systems is selection for further education or occupation, especially in developing counties (Little, 2005). According to Little & Wolf (1996) other purposes include; the monitoring and accountability of the performance of system and schools, and the promotion of learning through formative assessment. Hargreaves (2001) is of the opinion that multi-grade settings lead themselves to promote teaching, because they encourage teachers to recognize individual differences in learning, rather than treating all students as if they were of the same level. Therefore, multi-grade teachers need proper training for multi-grade classes to learn how to capitalize on this aspect. Regular and frequent formative assessment is an imperative tool for both teacher and student in multi-grade teaching (Little, 2005). UNESCO
(2004) report points out that a classic program is the Escuela Nueva which built assessment tasks from its inception into the self-study guide. Little (2005) describes that in term of this program, mastery is necessary before students can progress to the next unit or stage.
Chapter 3

METHOD AND PROCEDURE

Method and procedure is the structure or plan of investigation to collect information to answer the research questions. It describes in detail what will be done, how it will be done, what data will be needed, and what data gathering instruments will be used. (Farooq, 2001). This study will be both qualitative and quantitative (mixed method) in nature. As most cited criticism of qualitative research are presumed lack of validity and reliability of its findings, therefore, the issue of validity and reliability was addressed by the addition of structured questionnaires in this particular study. The researcher investigated the aspects of curriculum, teaching strategies, classroom management, and use of teaching materials, teachers training, and parents and community involvement in multi-grade teaching.

3.1 POPULATION

Twenty Five District Officers(male), Twenty Five Deputy District Officers (male), and 150 Assistant District Education Officers, 45,366 primary school teachers (male), 1,885,295 enrolled students of multi-grade primary schools (1,189,063 male and 696,232 female) and 20,032 multi-grade primary schools including 2,543 single-teacher schools, 7,836 two-teacher schools, 3,882 three-teacher schools, 2,061 four-teacher schools, 1,405 five-teacher schools, and 2,305 Mosque/Maktab schools in the province of Khyber Pukhtoonkhwa constituted the Population of the study.

3.2 SAMPLE
Five District Education Officers (male), one each from districts Nowshera, Peshawar, Mardan, D.I. Khan, and Abbotabad. Five Deputy District Officers (male), one each from the above mentioned districts. Thirty Assistant District Education Officers of district Nowshera, Peshawar, Mardan, D.I. Khan and Abbotabad. Fifty multi-grade schools, 10 each from districts Nowshera, Peshawar, Mardan, D.I. Khan and Abbotabad; and 150 primary school teachers (PSTs) 30 primary school teachers (PSTs), 10,007 multi-grade students from each district were selected through purposive sampling as sample of the population.

<table>
<thead>
<tr>
<th>S. NO</th>
<th>Name of category</th>
<th>Nowshera</th>
<th>Peshawar</th>
<th>Mardan</th>
<th>D.I.Khan</th>
<th>Abbotabad</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>D.E.Os(Male)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>D.D.E.Os(Male)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>A.D.E.Os</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>4</td>
<td>Multi-grade Schools</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>Primary School teachers(PSTs)</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>30</td>
<td>150</td>
</tr>
<tr>
<td>6</td>
<td>Multi-grade school students</td>
<td>2,136</td>
<td>2317</td>
<td>2,288</td>
<td>1,742</td>
<td>1,514</td>
<td>10,007</td>
</tr>
</tbody>
</table>

### Table 3.1 Sample Allocation

#### 3.3 RESEARCH INSTRUMENTS

The researcher personally collected data by using the research tools of checklist for direct observation and close-ended three points rating scale questionnaires, one questionnaire for the Primary School Teachers (PSTs) comprised of forty five items and the other for Professional Support Staff composed of twenty items.

#### 3.3.1 Pilot-testing of Research Instruments

Questionnaires for Primary School Teachers (PSTs) and Professional Support Staff were pilot tested locally in district Nowshera on above mentioned functionaries. Some items were
revised on the consultation of the participants and some new were included while irrelevant items were excluded. The supervisor of the study pointed out flaws, and advised changes. The flaws were corrected and changes were made immediately, and both questionnaires were finalized. The researcher personally collected data by using the research tools of checklist for direct observation and close-ended three points rating scale questionnaires. The researcher constructed a checklist with three options (Mostly, To some extent, and Not at all) for personal observation to observe closely the aspects like curriculum, teaching strategies, classroom management, use of teaching materials, teacher training, community involvement, and basic facilities provided for multi-grade setup. Two different types of questionnaires were used, one for the Primary School teachers (PSTs) and the other for professional support staff. The questionnaire for Primary School Teachers (PSTs) was comprised of forty five statements, ten for curriculum, eight on teaching strategies, eight for classroom management, five for use of teaching materials, nine for teachers training, and five for parents and community involvement. The questionnaire for Primary School Teachers (PSTs) was translated into Urdu for the convenience of the Primary School Teachers (PSTs). And “Not at all” were given for each statement. The respondents had to choose one of the options and tick the relevant box in front of each statement.

3.4 DATA COLLECTION

The researcher observed personally ten selected multi-grade schools each from districts Nowshera, Peshawar, Mardan, D.I. Khan and Abbotabad through direct observation on the aspects of curriculum, instructional strategies, use of teaching materials, teachers training and,
parent and community involvement. The researcher recorded the observations in a note book on mentioned aspects separately, for each multi-grade school, selected for the sample.

Data from primary school teachers and professional support staff was collected through three points rating scale questionnaire. The questionnaire for Primary School Teachers (PSTs) comprised 45 items. Each item had three options “Mostly”, “To some extent” and “Not at all” in front of each item. The respondents had to choose one option from “Mostly, “To some extent”” or “Not at all”. As the researcher collected data in person, he briefed the participants and explained each statement of the questionnaires to the respondent. The researcher stayed for at least two hours in every sample school and closely observed the multi-grade classrooms. The process of data collection was completed in ten weeks.

3.5 ANALYSIS OF DATA

The recorded observations of each sampled school on the aspects of curriculum, teaching strategies, teaching materials, classroom management, teacher training, parent and community involvement, and basic facilities provided to multi-grade schools were tabulated and analyzed through the degree of satisfaction of the researcher, by selecting one of the given options of Mostly, To some extent, and Not at all.

The data collected through questionnaire from the Primary School teachers (PSTs) and professional support staff was tabulated and analyzed through statistical tools of percentages, and Chi- square.

\[ \text{Chi-Square} = X^2 = \sum \frac{(fe-fo)^2}{fe} \]

Degree of freedom = df = 2

P- Value = 0.05
Chapter 4

ANALYSIS AND INTERPRETATION OF DATA

The questionnaire for Primary School Teachers (PSTs) consisted of 45 statements on curriculum, instructional technology, instructional materials, teachers training, classroom management, and community involvement. The researcher analyzed each statement of the questionnaire through statistical tools of percentages and Chi Square.

VIEWS OF PRIMARY SCHOOL TEACHERS

Table 1: The curriculum is up to the level of the students.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>43</td>
<td>76</td>
<td>31</td>
<td>150</td>
<td>21.72</td>
</tr>
<tr>
<td>Percentage</td>
<td>28.67</td>
<td>50.67</td>
<td>20.66</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 explains that 28.67 per cent of the Primary School Teachers responded that Curriculum was mostly up to the level of students, 50.67 per cent of the respondents were of the view that it was up to the level of the students to some extent, and only 20.66 percent of the participants were not in favor of the statement. When the statement was analyzed through Chi Square tool of analysis, the calculated value for the statement was found 21.72 while the table value, at 0.05. The calculated value was greater than table value. The statement that “curriculum was up to the level of students” was found significant, and therefore, it was accepted.

Table 2: The curriculum is vertically integrated.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
</table>
Table 2 shows that 42 per cent of the respondents responded in favor of statement that curriculum was mostly vertically integrated, 44 per cent of the respondents were of the opinion that the curriculum was vertically integrated to some extent, and 14 per cent did not agree to the statement. When the responses of the Primary School Teachers were analyzed through Chi Square, the calculated value was found 25.32, greater than the table value at 0.05 level. The statement was significant, hence, it was accepted.

**Table 3**: The curriculum is fulfilling the needs of the society.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>79</td>
<td>50</td>
<td>21</td>
<td>150</td>
<td>33.60</td>
</tr>
<tr>
<td>Percentage</td>
<td>52.67</td>
<td>33.33</td>
<td>14</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 indicates that curriculum was fulfilling the needs of the society. 52.67 per cent of the respondents were mostly in favor of the statement, 33.33 per cent of the respondents agreed to some extent, and 14 per cent of the respondents disagreed to the statement. When the calculated value and table were compared through Chi Square tool, the calculated value was found 33.60 greater than the table value at 0.05 level. The statement was highly significant, and therefore, it was accepted.

**Table 4**: The curriculum is in psychological sequence.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>49</td>
<td>66</td>
<td>35</td>
<td>150</td>
<td>9.64</td>
</tr>
</tbody>
</table>
Table 4 explains that Curriculum was in psychological sequence, 32.67 per cent of the participants mostly agreed to the statement, 44 per cent of the teachers agreed to the statement to some extent and 23.33 per cent of the participants did not agree to the statement at all. Chi Square was applied to clarify and verify the result for the statement. The table value at 0.05 was 5.991 found less than the calculated value of 9.64, therefore, the statement was significant, hence it was accepted.

Table 5: The conventional school curriculum addresses the requirements of Multi-grade classrooms.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>17</td>
<td>39</td>
<td>94</td>
<td>150</td>
<td>62.92</td>
</tr>
<tr>
<td>Percentage</td>
<td>11.33</td>
<td>26</td>
<td>62.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 elaborates that 11.33 per cent of the Primary School Teachers were of the opinion that the conventional school curriculum mostly addressed the requirements of multi-grade classroom, 26 per cent of the teachers supported the statement to some extent, and 62.67 per cent of the teachers were not in favor of the statement at all. Again, the values of the statement were analyzed through Chi-Square; the calculated value 62.92 was greater than the table value 5.991 at 0.05. So, the statement was highly significant negatively, therefore, it was rejected.

Table 6: The activities included in the curriculum are practicable in multi-grade classroom.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>28</td>
<td>73</td>
<td>49</td>
<td>150</td>
<td>20.28</td>
</tr>
</tbody>
</table>
Table 6 shows that only 18.67 per cent of the participants supported the statement that activities included in the curriculum were mostly practicable in multi-grade classroom, 48.67 per cent of the participants agreed to some extent, and only 33.66 per cent of the participants did not agree to the statement at all. Through Chi Square the calculated value was found 20.28, greater than the table value at 0.05 level. Hence, being significant, the statement captioned above was accepted.

Table 7: The curriculum is updated to the needs of the modern world.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>54</td>
<td>72</td>
<td>24</td>
<td>150</td>
<td>23.52</td>
</tr>
<tr>
<td>Percentage</td>
<td>36</td>
<td>48</td>
<td>16</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 7 indicates that 36 per cent of the respondents were of the opinion that curriculum was mostly updated to the needs of the modern world, 48 per cent of respondents responded that it was updated to some extent, and only 16 per cent of the respondents did not support the statement captioned above. The Chi Square value of 23.52 was found greater than the table at 0.05 level. The statement was found significant and therefore, it was accepted.

Table 8: The curriculum is flexible to change.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>101</td>
<td>41</td>
<td>8</td>
<td>150</td>
<td>88.92</td>
</tr>
<tr>
<td>Percentage</td>
<td>67.33</td>
<td>27.33</td>
<td>5.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Table 8 shows that 67.33 per cent of the participants responded that curriculum was mostly flexible to change, 27.33 per cent of the respondents agreed to some extent, and only 5.34 per cent did not agree. Chi Square value of 88.92 was found greater than the table value at 0.05. So, the statement was found significant, and therefore, it was accepted

Table 9: The curriculum is completed in the given time of academic year.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>22</td>
<td>34</td>
<td>94</td>
<td>150</td>
<td>59.52</td>
</tr>
<tr>
<td>Percentage</td>
<td>14.67</td>
<td>22.67</td>
<td>62.66</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 9 explains that only 14.67 per cent of the respondents were of the view that curriculum was mostly completed in the given time of academic year, 22.67 per cent agreed to some extent, and 62.66% of the participants were of the opinion that the curriculum was not completed in the given time of academic. Chi Square value was found 59.52, greater than the table value at 0.05. The statement was found significant in favor of “Not at all” and therefore, it was rejected.

Table 10: The curriculum designed for mono-grade teaching is taught to multi-grade classrooms.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>79</td>
<td>35</td>
<td>36</td>
<td>150</td>
<td>15.64</td>
</tr>
<tr>
<td>Percentage</td>
<td>52.67</td>
<td>23.33</td>
<td>24</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 10 elaborates that ‘curriculum designed for mono-grade teaching was taught to multi-grade classrooms’ was the opinion of 52.67 per cent participants. 23.33 per cent agreed to some extent, and 24 per cent were of the view that the curriculum designed for mono-grade teaching was not being taught to multi-grade classrooms. Chi Square value was found to be
15.64, greater than the table value at 0.05 which indicated the significance of the statement and therefore, it was accepted.

**Table 11:** The teacher develops a wide range of teaching strategies in multi-grade classroom.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>111</td>
<td>32</td>
<td>7</td>
<td>18</td>
<td>117.88</td>
</tr>
<tr>
<td>Percentage</td>
<td>74</td>
<td>21.33</td>
<td>4.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 11 explains that 74 per cent of the respondents supported the statement that the teachers mostly developed a wide range of teaching strategies in multi-grade classroom, 21.33 per cent agreed to some extent, and only 4.67 per cent of the participants did not agree. Chi Square was applied for the analysis of the statement, the calculated value 117.88 was found greater than the table value at 0.05. So, the statement was found highly significant and therefore, it was accepted.

**Table 12:** The teacher provides opportunity to learners for personal attention.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>37</td>
<td>52</td>
<td>67</td>
<td>150</td>
<td>5.88</td>
</tr>
<tr>
<td>Percentage</td>
<td>24.67</td>
<td>34.67</td>
<td>40.66</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 12 shows that only 24.67% of the participants were mostly of the opinion that the teachers provided opportunity to learners for personal attention, 34.67% of the participants agreed to some extent, and 40.66% totally opposed the statement. Chi Square value 5.88 was found less than the table value at 0.05 . The statement was found insignificant and therefore, it was not accepted.

**Table 13:** The teacher teaches one grade while other grades work on its own.
Table 13 indicates that 58 per cent of the participants were of the view that the teacher mostly taught one grade while other grades worked on its own, 37.33 per cent of the teachers were found agreed to some extent, and only 6.67 per c were not found in support of the statement. To analyze the statement, Chi-Square was applied. The calculated value 55.84 was found greater than the table value at 0.05. The statement was found significant and therefore, it was accepted.

**Table 14:** The teacher teaches a theme to all grades at the same time.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>18</td>
<td>43</td>
<td>89</td>
<td>150</td>
<td>51.88</td>
</tr>
<tr>
<td>Percentage</td>
<td>12</td>
<td>28.67</td>
<td>59.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 14 describes that 12 per cent of the Primary School Teachers were of the view that the teacher mostly taught a theme to all grades at the same time, 28.67 per cent respondents were found agreed to some extent, and 59.33 per cent of the respondents did not agree. Chi Square was applied to confirm the result; the table value 5.991 at 0.05 was less than the calculated value 51.88. The statement was found significant in favor of “Not at all” and therefore, it was rejected.

**Table 15:** The teacher considers learners’ individual differences when planning for instructions.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>93</td>
<td>34</td>
<td>23</td>
<td>150</td>
<td>56.68</td>
</tr>
</tbody>
</table>
Table 15 explains that 62 per cent of respondents favored the statement that the teacher mostly considered learners individual differences when planning for instruction, 22.67 per cent of the respondents agreed to some extent, and only 17.33 per cent opposed the statement. Chi Square results supported the statement, the calculated value 56.68 was found greater than the table value at 0.05. Hence, the statement was accepted.

**Table 16:** The teacher provides opportunity to students for collaborative learning.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>100</td>
<td>44</td>
<td>6</td>
<td>150</td>
<td>89.44</td>
</tr>
<tr>
<td>Percentage</td>
<td>66.67</td>
<td>29.33</td>
<td>4</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 16 shows that 66.67 per cent of the respondents were of the view that teacher mostly provide opportunity to students for collaborative learning, 29.33 per cent agreed to some extent, and only 4 per cent of the respondents opposed the statement. Chi Square was also applied for the analysis of the statement, the calculated value 89.44 was found greater than the table value at 0.05. The statement was found significant and therefore, it was accepted.

**Table 17:** The teacher also provides opportunity to students for individual learning.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>94</td>
<td>45</td>
<td>11</td>
<td>150</td>
<td>69.64</td>
</tr>
<tr>
<td>Percentage</td>
<td>62.67</td>
<td>30</td>
<td>7.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 17 indicates that 62.67 per cent respondents replied the teacher mostly provides opportunity to students for individual learning, 30 per cent of the teachers agreed to some extent,
and only 7.33 per cent of the participants were of the opinion that the teacher was not providing
opportunity to students for individual learning at all. Chi Square was applied. Calculated value
69.64 was found greater than the table value 0.05. The statement was significant and therefore, it
was accepted.

Table 18: Students are assessed on daily basis.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>(\chi^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>36</td>
<td>71</td>
<td>43</td>
<td>150</td>
<td>13.72</td>
</tr>
<tr>
<td>Percentage</td>
<td>24</td>
<td>47.33</td>
<td>28.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 18 describes that only 24 per cent of the respondents responded in favor of the
statement that students were mostly assessed on daily basis, 47.33 per cent of respondents
favored to some extent, and 28.67 per cent did not agree to the statement at all. Chi Square
calculated value of 13.72 was found greater than the table value at 0.05. The statement was
found significant and therefore, it was accepted.

Table 19: Appropriate teaching and learning materials are available for multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>(\chi^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>19</td>
<td>37</td>
<td>103</td>
<td>150</td>
<td>91.59</td>
</tr>
<tr>
<td>Percentage</td>
<td>6.67</td>
<td>24.67</td>
<td>68.66</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 19 shows that only 6.67 per cent of the teachers were of the opinion that
appropriate teaching and learning materials were mostly available for multi-grade teaching,
24.67 per cent of the teachers agreed to some extent, and 68.66 per cent of the teachers were of
the view that appropriate teaching and learning materials were not available for multi-grade
teaching at all. Chi Square value of 91.59 was found greater than the table value 5.991 at 0.05. The statement was found significant in favor of “Not at all” and therefore, it was rejected.

**Table 20:** Teachers have access to instructional materials to support their instructions.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>22</td>
<td>30</td>
<td>98</td>
<td>150</td>
<td>69.76</td>
</tr>
<tr>
<td>Percentage</td>
<td>14.67</td>
<td>20</td>
<td>65.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 20 explains that 14.67 per cent of the respondents were of the view that teachers had mostly access to instructional materials to support their instructions, 20 per cent responded that they had access to some extent, and 65.33 per cent were of the view that the teachers had no access to instructional materials at all to support their instructions. To analyze the statement, Chi Square was applied. Calculated value 69.76 was found greater than the table value at 0.05. The statement was found significant in favor of “Not at all” and therefore, it was rejected.

**Table 21:** The teaching materials are relevant to current contents.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>18</td>
<td>34</td>
<td>98</td>
<td>150</td>
<td>71.68</td>
</tr>
<tr>
<td>Percentage</td>
<td>12</td>
<td>22.67</td>
<td>65.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 21 indicates that 12 per cent of the respondents responded that the teaching materials were mostly relevant to current contents, 22.67 per cent of the teachers reported relevance to some extent, and 65.33 per cent of the teachers were of the opinion that the teaching materials were not relevant to current contents at all. When the statement was analyzed through Chi Square, calculated value 71.68 was found greater than the table value at 0.05. The statement was found significant in favor of “Not at all” and therefore, it was rejected.
Table 22: Teachers have practical guidebooks at their schools.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>66</td>
<td>20</td>
<td>64</td>
<td>150</td>
<td>27.04</td>
</tr>
<tr>
<td>Percentage</td>
<td>44</td>
<td>13.33</td>
<td>42.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 22 elaborates that teachers mostly had practical guidebooks at their schools, 44 per cent of the participants responded in favor of the statement, 13.33 per cent agreed to some extent, and 42.67 per cent of the participants were not in support of the statement at all. Chi Square value of 27.04 was found greater than table value at 0.05. The statement being significant was accepted.

Table 23: The teachers make proper use of instructional materials when teaching in multi-grade classroom.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>27</td>
<td>39</td>
<td>84</td>
<td>150</td>
<td>36.12</td>
</tr>
<tr>
<td>Percentage</td>
<td>18</td>
<td>26</td>
<td>56</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 23 shows that 18 per cent of the Primary School Teachers were of the view that the teachers mostly make proper use of instructional materials when teaching in multi-grade classroom, 26 per cent of the teachers agreed to some extent, and 56 per cent of the teachers were of the view that the teachers were not making proper use of instructional materials at all when teaching in multi-grade classrooms. Chi Square value 36.12 was found greater than the table value 5.991 at 0.05. The statement was significant in favor of “Not at all” and therefore, it was rejected.

Table 24: The teacher is trained for primary school teaching.
Table 24 indicates that 96.67 per cent of the primary school teachers were of the opinion that the teachers were mostly trained for primary school teaching, 2.67 per cent of the teachers agreed to some extent, and 0.66 per cent disagreed with the statement. Chi Square, value 270.84 was found greater the table value at 0.05. The statement was highly significant and therefore, it was accepted.

Table 25: The teacher is also trained for multi-grade teaching (MGT).

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>145</td>
<td>4</td>
<td>1</td>
<td>150</td>
<td>270.84</td>
</tr>
<tr>
<td>Percentage</td>
<td>96.67</td>
<td>2.67</td>
<td>0.66</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 25 describes that 26 per cent teachers responded that the teacher was mostly trained, 24% agreed to some extent, and 50% of the teachers were of the view that the teachers were not trained for multi-grade teaching at all. Chi Square value was found to be 18.84, greater than the table value at 0.05. The statement was found significant in favor of “Not at all” which indicated disagreement to the statement, and therefore, it was rejected.

Table 26: Multi-grade teaching needs more preparation and planning.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>123</td>
<td>22</td>
<td>5</td>
<td>150</td>
<td>162.76</td>
</tr>
<tr>
<td>Percentage</td>
<td>82</td>
<td>14.67</td>
<td>3.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Table 26 shows that 82% respondents were of the view that multi-grade teaching mostly needed more preparation and planning. 14.67% agreed “to some extent” and 3.34% of the participants were not in favor of the statement at all. Chi Square tool was applied for the analysis of the statement; calculated value 162.76 was greater than the table value at 0.05. So, the statement was significant and therefore, it was accepted.

**Table 27**: Teacher likes to teach in multi-grade setting.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>20</td>
<td>25</td>
<td>105</td>
<td>150</td>
<td>91.0</td>
</tr>
<tr>
<td>Percentage</td>
<td>13.33</td>
<td>16.67</td>
<td>70</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 27 explains that 13.33 per cent of the respondents were of the opinion that teachers mostly like to teach in multi-grade setting, 16.67 per cent of the teachers agreed to some extent, and 70 per cent of the respondents were of the view that teachers did not like to teach in multi-grade setting at all. Chi Square value 91.0 was found much greater than the table value at 0.05. The statement was highly significant in favor of “Not at all” and therefore, it was rejected.

**Table 28**: Teachers consider multi-grade teaching more effective than mono-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>23</td>
<td>18</td>
<td>109</td>
<td>150</td>
<td>104.68</td>
</tr>
<tr>
<td>Percentage</td>
<td>17.33</td>
<td>12</td>
<td>72.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 28 shows that 17.33 per cent of the respondents showed their agreement to the statement that teachers mostly considered multi-grade teaching more effective than mono-grade teaching, 12 per cent agreed to some extent, and 72.67 per cent of the respondents did not
consider multi-grade teaching more effective than mono-grade teaching. Chi Square value 104.68 was found much greater than the table value at 0.05. The statement was highly significant in favor of “Not at all” and therefore, it was rejected.

**Table 29:** Government provides support and facilitation for multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>11</td>
<td>14</td>
<td>125</td>
<td>150</td>
<td>148.04</td>
</tr>
<tr>
<td>Percentage</td>
<td>7.33</td>
<td>9.33</td>
<td>83.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 29 indicates that only 7.33 per cent of the respondents agreed that government mostly provided support and facilitation for multi-grade teaching, 9.33 per cent of the teachers agreed to some extent, whereas 83.34 per cent of the respondents were of the opinion that the government was not providing support and facilitation for multi-grade teaching at all. Chi Square value 148.04 was found much greater than the table value at 0.05. The statement was highly significant in favor of “Not at all” and therefore, it was rejected.

**Table 30:** A system exists for the assessment of teaching and learning process.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>37</td>
<td>41</td>
<td>72</td>
<td>150</td>
<td>14.86</td>
</tr>
<tr>
<td>Percentage</td>
<td>24.67</td>
<td>27.33</td>
<td>48</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 30 explains that 24.67 per cent of the teachers supported the statement that a system mostly existed for the assessment of teaching and learning process, 27.33 per cent responded to some extent, and 48 per cent of the teachers were of the view that a system did not exist for the assessment of teaching and learning process at all. Chi Square value 14.86 was
found greater than the table value at 0.05. The statement was found significant and therefore, it was accepted.

**Table 31:** The teachers arrange group learning for students.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>101</td>
<td>41</td>
<td>8</td>
<td>150</td>
<td>88.92</td>
</tr>
<tr>
<td>Percentage</td>
<td>67.33</td>
<td>27.33</td>
<td>5.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 31 elaborates that 67.33 per cent of the respondents responded that teachers mostly arranged group learning for the students, 27.33 per cent teachers supported the statement to some extent, and only 5.34 per cent of the respondents were not in favor of the statement. Chi Square was applied for the analysis of the statement, calculated value 88.92 was greater than the table value at 0.05. The statement was significant, and therefore, it was accepted.

**Table 32:** The teachers also make arrangement for individual learning of the students.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>92</td>
<td>42</td>
<td>16</td>
<td>150</td>
<td>59.68</td>
</tr>
<tr>
<td>Percentage</td>
<td>61.33</td>
<td>28</td>
<td>10.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 32 indicates that 61.33 per cent were of the opinion that the teachers mostly made arrangement for individual learning of the students, 28 per cent agreed to some extent, and 10.67 per cent disagreed to the statement. Chi Square value 59.68 was greater than the table value at 0.05. So, the statement was significant, and therefore, it was accepted.

**Table 33:** The timetable is followed strictly in the classroom.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>100</td>
<td>33</td>
<td>17</td>
<td>150</td>
<td>77.56</td>
</tr>
</tbody>
</table>
Table 33 shows that 66.67 per cent of the teachers were of the view that the timetable was followed strictly in the classroom, 22 per cent of the teachers agreed to some extent, and 11.33 per cent of the teachers were not in support of the statement. Chi Square value 77.56 was found greater than the table value at 0.05. The statement was significant, and therefore, it was accepted.

Table 34: The timetable is flexible in accordance with the needs of the students.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>96</td>
<td>39</td>
<td>15</td>
<td>150</td>
<td>69.24</td>
</tr>
<tr>
<td>Percentage</td>
<td>64</td>
<td>26</td>
<td>10</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 34 describes that 64 per cent of the participants responded that the timetable was mostly flexible in accordance with the needs of the students, 26 per cent of the teachers agreed to some extent, and only 10 per cent of the participants were not in favor of the statement. Chi Square value 69.24 was found greater than the table value at 0.05. The statement was significant, and therefore, it was accepted.

Table 35: Classrooms rules and procedure are developed collaboratively among the teachers.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>108</td>
<td>20</td>
<td>22</td>
<td>150</td>
<td>100.96</td>
</tr>
<tr>
<td>Percentage</td>
<td>72</td>
<td>13.33</td>
<td>5.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Table 35 explains that 72 per cent of the teachers were of the opinion that class rules and procedure were mostly developed collaboratively among the teachers, 13.33 per cent of the teachers supported to some extent, and only 5.67 per cent did not agree to the statement at all. Chi Square value 100.96 was found much greater than the table value at 0.05. The statement was highly significant, and therefore, it was accepted.

Table 36: Discipline is maintained in the classroom.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>92</td>
<td>50</td>
<td>8</td>
<td>150</td>
<td>70.56</td>
</tr>
<tr>
<td>Percentage</td>
<td>61.33</td>
<td>13.33</td>
<td>5.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 36 shows that 61.33 per cent of the teachers responded that discipline was mostly maintained in the classroom, 13.33 per cent agreed to some extent, and only 5.67 per cent of the respondents were not in favor the statement. Chi Square value 70.56 was found much greater than the tabulated value at 0.05. The statement was found highly significant, and therefore, it was accepted.

Table 37: Most of the time monitor supervises one grade when the teacher teaches to other grade.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>80</td>
<td>49</td>
<td>21</td>
<td>150</td>
<td>34.84</td>
</tr>
<tr>
<td>Percentage</td>
<td>53.33</td>
<td>32.67</td>
<td>14</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 37 indicates that 53.33 per cent of the teachers were of the view that most of the time monitor supervised one grade when the teacher taught the other grade, 32.67 per cent of the teachers agreed to some extent; only 14 per cent disagreed to the statement. Chi Square value
34.84 was found greater than table value at 0.05. So, the statement was significant, and therefore, it was accepted.

**Table 38**: The monitor’s role is to keep the students quiet.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>68</td>
<td>59</td>
<td>23</td>
<td>150</td>
<td>22.68</td>
</tr>
<tr>
<td>Percentage</td>
<td>45.33</td>
<td>39.33</td>
<td>15.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 38 elaborates that 45.33 per cent of the teachers responded that mostly the monitor’s role was to keep the students quiet, 39.33 per cent of the teachers responded to some extent, and 15.34 per cent of the participants did not agree to the statement. Chi Square value 22.68 was found greater than the table value at 0.05. The statement was significant, and therefore, it was accepted.

**Table 39**: The older students cooperate with the younger ones in their work.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>86</td>
<td>50</td>
<td>14</td>
<td>150</td>
<td>51.84</td>
</tr>
<tr>
<td>Percentage</td>
<td>57.33</td>
<td>33.33</td>
<td>9.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 39 explains that 57.33 per cent of the respondents opined in favor of the statement that the older students were mostly cooperating with younger ones in their work, 33.33 per cent responded to some extent, and only 9.34 per cent of the teachers opposed the statement. Chi Square value 51.84 was found greater than the table value at 0.05. The statement was significant, and therefore, it was accepted.
Table 40: The teaching and learning environment is conducive to academic process.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>64</td>
<td>51</td>
<td>35</td>
<td>150</td>
<td>13.54</td>
</tr>
<tr>
<td>Percentage</td>
<td>42.67</td>
<td>34</td>
<td>23.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 40 shows that the teaching environment was mostly conducive to academic process, it was reported by 42.67 per cent respondents, 34 per cent of the respondents agreed to some extent, and 23.33 per cent of the teachers disagreed with the statement. Chi Square value 13.54 was found greater than the table value at 0.05 which indicated significance of the statement. Therefore, it was accepted.

Table 41: Parents involvement is important for multi-grade.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>115</td>
<td>18</td>
<td>17</td>
<td>150</td>
<td>126.76</td>
</tr>
<tr>
<td>Percentage</td>
<td>76.67</td>
<td>12</td>
<td>11.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 41 indicates that 76.67 per cent of the teachers responded that parents involvement was mostly important for multi-grade teaching, 12 per cent agreed to some extent and 11.33 per cent of the participants opposed the statement. Chi Square value 126.76 was found greater than the table value at 0.05. The statement was highly significant, and therefore, it was accepted.

Table 42: Community is involved in management and support of multi-grade environment.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>29</td>
<td>45</td>
<td>76</td>
<td>150</td>
<td>22.84</td>
</tr>
</tbody>
</table>
Table 42 shows that 19.33 per cent of the respondents viewed that Community was mostly involved in management and support of multi-grade environment, 30 per cent of the teachers agreed to some extent, and 50.67 per cent respondents did not agree to the statement at all. Chi square value 22.84 was greater than the table value at 0.05 in favor of “Not at all”. The statement was rejected.

Table 43: Parents communicate the teachers about education of their children.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>13</td>
<td>23</td>
<td>114</td>
<td>150</td>
<td>123.88</td>
</tr>
<tr>
<td>Percentage</td>
<td>8.67</td>
<td>15.33</td>
<td>76</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 43 explains that only 8.67 per cent of the respondents favored the statement that Parents mostly communicated the teachers about education of their children, only 15.33 per cent of the teachers agreed to some extent, and 76 per cent of the teachers were of the opinion that Parents did not communicate the teachers in education of their children. Chi Square value 123.88 was much greater than the table value at 0.05. The statement was highly significant in favor of “Not at all”, and therefore, it was rejected.

Table 44: Prominent personalities visit the school to solve local problems of the school.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>6</td>
<td>30</td>
<td>114</td>
<td>150</td>
<td>128.64</td>
</tr>
<tr>
<td>Percentage</td>
<td>4</td>
<td>20</td>
<td>76</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Table 44 indicates that only 4 per cent of the teachers were of the view that prominent personalities were mostly visiting the school to solve local problems of the school, 20 per cent of the teachers agreed to some extent, and 76 per cent of the teachers were of the view that prominent personalities were not visiting the school to solve the local problems of the school. Chi Square value 128.64 was greater than the table value at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

Table 45: Parents and Teachers Council (PTC) works together effectively.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>80</td>
<td>54</td>
<td>16</td>
<td>150</td>
<td>41.44</td>
</tr>
<tr>
<td>Percentage</td>
<td>53.33</td>
<td>36</td>
<td>10.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 45 shows that 53.33 per cent of the respondents of the opinion that Parents and Teachers Council (PTC) works together effectively, 36 per cent agreed to some extent, and 10.67 per cent did not agree to the statement. Chi Square value 41.44 was greater than the table value at 0.05. The statement was found significant, and therefore, it was accepted.

VIEWS OF PROFESSIONAL SUPPORT STAFF

Table 46: There are two or three classrooms primary schools in this district.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>17</td>
<td>13</td>
<td>0</td>
<td>30</td>
<td>15.8</td>
</tr>
<tr>
<td>Percentage</td>
<td>56.67</td>
<td>48.33</td>
<td>0</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 46 explains that 56.67 per cent of the professional support staff was of the opinion that there were mostly two or three classrooms primary schools existing in this district,
48.33 percent of the participants were agreed to some extent, and nobody agreed to the statement. Chi Square 15.8 was greater than the table value at 0.05. The statement was found significant and therefore, it was accepted.

**Table 47:** There are multi-grade schools existing in this district where one to three (1- 3) teachers teach from prep to fifth (Prep-5th) classes.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>17</td>
<td>12</td>
<td>1</td>
<td>30</td>
<td>11.7</td>
</tr>
<tr>
<td>Percentage</td>
<td>56.67</td>
<td>40</td>
<td>3.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 47 shows that 56.67 per cent of the respondents were of the view that there were mostly multi-grade schools in this district where one to three(1-3) teachers were teaching from prep to fifth (prep-5th) classes, 40 percent of the respondents agreed to some extent, and only 3.33 per cent did not agree to the statement. Chi Square value 11.7 was greater than the table value at 0.05. The statement was found significant and therefore, it was accepted.

**Table 48:** The teachers of these multi-grade schools are properly trained for multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>1</td>
<td>10</td>
<td>19</td>
<td>30</td>
<td>16.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>3.33</td>
<td>33.33</td>
<td>63.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 48 indicates that only 3.33 per cent of the respondents were mostly in favor of the statement that the teachers of these multi-grade schools were properly trained for multi-grade teaching. 33.33 per cent agreed to some extent, and 63.34 per cent did agree at all. Chi Square
value 16.2 was greater than the table value at 0.05. The statement was found significant in favor of “Not at all”, therefore, it was rejected.

**Table 49:** Special attention is paid to multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>1</td>
<td>4</td>
<td>25</td>
<td>30</td>
<td>34.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>3.33</td>
<td>13.33</td>
<td>83.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 49 states that only 3.33 percent of the professional support staff was of the view that special attention was mostly paid to multi-grade teaching, 13.33 per cent agreed to some extent, and 83.34 per cent did not agree at all. Chi Square 34.2 was found greater than the table value at 0.05. The statement was significant in favor of “Not at all”, therefore, it was rejected.

**Table 50:** These multi-grade schools are officially entitled for multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>3</td>
<td>2</td>
<td>25</td>
<td>30</td>
<td>33.8</td>
</tr>
<tr>
<td>Percentage</td>
<td>10</td>
<td>6.66</td>
<td>83.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 50 explains that 10 per cent of the respondents were of the opinion that multi-grade schools were mostly officially recognized for multi-grade teaching, only 6.66 per cent agreed to some extent, and 83.34 per cent were in favor of “Not at all”. Chi square value 33.8 was greater than the table value at 0.05. The statement was significant in favor of “Not at all”, and therefore, it was rejected.

**Table 51:** The government is providing special financial support and facilitation for multi-grade schools.
<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Freq</th>
<th>Percentages</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>0</td>
<td>9</td>
<td>21</td>
<td>30</td>
<td></td>
<td>22.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>0</td>
<td>30</td>
<td>70</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 51 shows that none of the respondents was of the view that the government was providing special financial support and facilitation for multi-grade teaching. 30 per cent of the professional staff agreed to some extent, and 70 per cent did not agree at all. The calculated value 22.2 of Chi Square was found greater than table value at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

Table 52: Teachers are encouraged by the government with incentives who teach in multi-grade setting.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Freq</th>
<th>Percentages</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>0</td>
<td>4</td>
<td>26</td>
<td>30</td>
<td></td>
<td>39.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>0</td>
<td>13.33</td>
<td>86.67</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 52 indicates that none of the professional support staff was of the opinion that teachers were mostly encouraged by the government with incentives who taught in multi-grade setting, 13.33 per cent agreed to some extent, and 86.67 per cent did not agree to the statement. Chi Square value 39.2 was found greater than the table value at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

Table 53: There is a separate curriculum for multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Freq</th>
<th>Percentages</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>0</td>
<td>5</td>
<td>25</td>
<td>30</td>
<td></td>
<td>35.0</td>
</tr>
</tbody>
</table>
Table 53 expresses that none of the respondents was of the view that there was mostly a separate curriculum for multi-grade teaching, 16.67 per cent of the respondents agreed to some extent, and 83.33 per cent did not agree to the statement at all. Chi Square value 35.0 was greater than the table value at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

Table 54: The curriculum taught in multi-grade schools is integrated.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentages</td>
<td>0</td>
<td>16.67</td>
<td>83.33</td>
<td>100</td>
<td>35.0</td>
</tr>
</tbody>
</table>

Table 54 explains that 33.33 per cent of the respondents were of the opinion that the curriculum taught in multi-grade classes was mostly integrated, 56.67 per cent of the respondents agreed to some extent and 10 per cent of the professional support staff did not agree to the statement at all. Chi Square value 35.0 was greater than the table value at 0.05. The statement was found significant, and therefore, it was accepted.

Table 55: The teachers adopt multi-grade teaching as an effective teaching approach.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentages</td>
<td>0</td>
<td>16.67</td>
<td>83.33</td>
<td>100</td>
<td>35.0</td>
</tr>
</tbody>
</table>

Table 55 explains that 33.33 per cent of the respondents were of the opinion that the curriculum taught in multi-grade classes was mostly integrated, 56.67 per cent of the respondents agreed to some extent and 10 per cent of the professional support staff did not agree to the statement at all. Chi Square value 35.0 was greater than the table value at 0.05. The statement was found significant, and therefore, it was accepted.
Table 55 shows that 30 per cent of the professional support staff was of the view that the teachers mostly adopted multi-grade teaching as an effective teaching approach, 10 per cent agreed to some extent, and 60 per cent of the respondents were found in favor of “Not at all”. Chi Square value 11.4 was greater than the table value at 0.05. The statement was significant in favor of “Not at all” therefore, it was rejected.

Table 56: The teachers adapt multi-grade teaching by necessity.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>24</td>
<td>6</td>
<td>0</td>
<td>30</td>
<td>21.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>80</td>
<td>20</td>
<td>0</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 56 indicates that 80 per cent of the respondents were of the opinion that the teachers mostly adopted multi-grade teaching by necessity, 20 per cent of them agreed to some extent, and none of them was in support of “Not at all”. Chi Square value 21.2 was greater than the table value at 0.05. The statement was found significant, and therefore, it was accepted.

Table 57: Multi-grade schools are supervised and assessed regularly.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>( \chi^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>14</td>
<td>15</td>
<td>1</td>
<td>30</td>
<td>12.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>46.67</td>
<td>50</td>
<td>3.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 57 states that 46.67 per cent of the respondents were of the opinion that multi-grade teaching was mostly supervised and assessed regularly, half of them agreed to some extent, and only 3.33 per cent did not agree at all. Chi Square value 12.2 was found greater than the table value at 0.05. The statement was significant, and therefore, it was accepted.
Table 58: Appropriate teaching and learning materials are provided for multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>2</td>
<td>12</td>
<td>16</td>
<td>30</td>
<td>10.4</td>
</tr>
<tr>
<td>Percentage</td>
<td>6.67</td>
<td>40</td>
<td>53.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 58 explains that only 6.67 per cent of the respondents were of the view that appropriate teaching and learning materials were mostly provided for multi-grade teaching, 40 per cent of the respondents agreed to some extent, 53.33 per cent did not agree to the statement at all. Chi Square value 10.4 was greater than the table value at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

Table 59: The teachers are using teaching and learning materials effectively in the classroom.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>1</td>
<td>16</td>
<td>13</td>
<td>30</td>
<td>12.6</td>
</tr>
<tr>
<td>Percentage</td>
<td>3.33</td>
<td>53.33</td>
<td>48.34</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 59 shows that only 3.33 per cent of the respondents were of the opinion that the teachers were mostly using teaching and learning materials effectively in the classroom, 53.33 per cent of them agreed to some extent, and 48.34 per cent did not agree at all. Chi Square value 12.6 was greater than the table value at 0.05. The statement was found significant, and therefore, it was accepted.

Table 60: Practical guidebooks are provided to teachers for multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/ Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/ Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 60 states that 0 per cent of the professional support staff was of the opinion that special workshops and seminars were mostly arranged to overcome the challenges of teachers in multi-grade teaching, 16.67 per cent agreed to some extent, and 83.33 per cent of the respondents were not agreed at all. To analyze the statement Chi Square was used, the calculated value 35.0 was greater than the table value 5.991 at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

**Table 61**: Special workshops and Seminars are arranged to overcome the challenge.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>0</td>
<td>17</td>
<td>13</td>
<td>30</td>
<td>15.8</td>
</tr>
<tr>
<td>Percentage</td>
<td>0</td>
<td>56.67</td>
<td>48.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 61 indicates that 0 per cent of the respondents’ point of view was that practical guides were mostly provided to teachers for multi-grade teaching, 56.67 per cent agreed to some extent, and 48.33 percent did not agree to the statement at all. At Chi Square, the calculated value 15.8 was greater than the table value 5.991 at 0.05. The statement was found significant, therefore, it was accepted.

**Table 62**: The government arranges in-service teachers training programs for the improvement of multi-grade teaching

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
</table>
Table 62 describes that only 6.67 per cent of the participants were of the view that the government mostly arranged In-service teachers training programs for the improvement of multi-grade teaching, 26.67 per cent were agreed to some extent, and 66.66 per cent of the participants were not in favor of the statement at all. At Chi Square, the calculated value 16.8 was greater than the table value 5.991 at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

Table 63: Parents and Community cooperate with each other to encourage multi-grade teaching.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>0</td>
<td>6</td>
<td>24</td>
<td>30</td>
<td>21.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>0</td>
<td>20</td>
<td>80</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 63 shows that none of the respondents was of the opinion that parents and community mostly cooperated each other to encourage multi-grade teaching, 20 per cent of the participants agreed to some extent, and 80 per cent were not in favor of the statement at all. Chi Square value 21.2 was greater than table value at 0.05. The statement was found significant in favor of “Not at all”, and therefore, it was rejected.

Table 64: Students are provided opportunity for activities and independent learning.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>4</td>
<td>21</td>
<td>5</td>
<td>30</td>
<td>21.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>13.33</td>
<td>70</td>
<td>16.67</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
Table 64 indicates that 13.33 per cent of respondent were of the view that students were mostly opportunity for activities and independent learning, 70 per cent of the participants agreed to some extent, and 16.67 per cent did not agree to the statement at all. Chi Square value 21.2 was greater than the table value at 0.05. The statement was found significant, and therefore, it was accepted.

Table 65: Parents and Teachers Counsel (PTC) activities are monitored.

<table>
<thead>
<tr>
<th>Frequencies/Percentage</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
<th>Total Frequencies/Percentage</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequencies</td>
<td>15</td>
<td>11</td>
<td>4</td>
<td>30</td>
<td>6.2</td>
</tr>
<tr>
<td>Percentage</td>
<td>50</td>
<td>36.67</td>
<td>13.33</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 65 explains that half of the professional support staff was of the opinion that Parents and Teachers Counsel (PTC) activities were mostly monitored, 36.67 per cent agreed to some extent, and 13.33 per cent of the respondents did not agree to the statement at all. Chi Square value 6.2 was greater than the table value at 0.05. The statement was found significant, and therefore, it was accepted.
TRECORDED OBSERVATIONS

GOVT. PRIMARY SCHOOL, BEHRAM KALI NEW NEHER NOWSHERA.

Total Number of teachers: 2
Total Number of students: 162
Combined grades: (i) Nursery, Grade II, and grade V = 83 students
(ii) Grade I, III, and IV = 79 students.

Observations Recorded

i. Curriculum

Students of different grades were taught separately, thus dividing the teaching time. Teachers focused on completing the curriculum and learners were left behind. The same curriculum designed for mono-grade teaching was taught in the classrooms. Written work was signed by the teacher but not much attention was given to correction and feedback.

ii. Instructional Strategies

The medium of instruction was Pashto. Teachers were making use of a variety of instructional strategies, depending on the topic and subject. Collaborative learning and group learning was observed in the subject of mathematics.

iii. Instructional Materials

Appropriate teaching and learning materials were not available for multi-grade teaching. Textbook and blackboard were the sources available for teaching. Other available instructional materials were outdated and were not relevant to current contents.

iv. Classroom Management

Students were sitting on the ground in circles. There were two blackboards installed on the ground. The teacher moved each grade toward the blackboard as they were taught by the teacher. Students could move around easily but movement was not encouraged.

v. Teacher Training
Both the teachers were trained for primary school teaching but they were not properly trained for multi-grade teaching. They were frustrated and did not like to teach in multi-grade setting because they could not manage more than one grade at the same time.

vi. Community Involvement

Not observed

vii. Basic Facilities

This was a school without building. Students were sitting in open air on the ground under the shady trees and they moved their mats with the shades of those trees. No basic facility such as drinking water, toilets, and furniture were provided. Teachers’ chairs, mats, students’ attendance registers, and blackboards were kept inside the nearby house.

GOVERNMENT PRIMARY SCHOOL DHOBIGOT NOWSHERA CANTT:
Total Number of teachers: 2
Total Number of students: 42
Grades Combined: (i) Nursery grade I and grade II = 26 students
(ii) Grade III, IV and V = 16 students

Observations Recorded
i. Curriculum

Nursery, grade I, and grade II were combined in one classroom and grade III, IV, and grade V were grouped in other classroom but the grades were taught separately in same classroom. Common theme teaching was also observed in the subject of English when the teacher was teaching “Noun and kinds of noun” to grade III, IV, and grade V. The same curriculum designed for mono-grade teaching was taught. The teachers’ main focus was on the completion of the course.

ii. Instructional Strategies

The teacher was using a number of teaching strategies during the instructions. Whole class teaching, group teaching, collaborative learning, and individual leaning was observed but
personal attention to the students was not observed. Teacher was prepared to teach multi-grade
class to some extent.

iii. Instructional Materials

Appropriate instructional materials were not available for multi-grade teaching. Textbook
and blackboard were the only sources of teaching.

iv. Classroom Management

Two separate blackboards were fixed on opposite walls of the classroom. Each grade
students were sitting facing the blackboard. The teacher was using the board turn by turn for
each grade. When the teacher was teaching one grade the other grades worked at their own.
Environment was conducive for teaching and learning process.

v. Teacher Training

One of two teachers was highly qualified and trained and had attended a workshop of
teachers on multi-grade teaching. He was enthusiastic for multi-grade teaching and considered it
as an effective teaching strategy.

vi. Community Involvement

This school was situated in the center of Nowshera Cantt: and the medium of instruction
was Urdu, yet parents sent their children to popular schools of the area due to the poor
performance and that is why, the total enrollment of the school was 42. Community involvement
was not observed at all.

vii. Basic Facilities

All basic facilities were provided. Environment was very much conducive for teaching
and learning process.

GOVERNMENT PRIMARY SCHOOL ALI ABAD RISALPUR, NOWSHERA
Total number of teachers: 2
Total number of students: 125
Total number of classrooms: 2
Combined grades: (i) Nursery, grade I, and grade V = Learners 72
(ii) Grade II, III, and grade IV = Learners 53

Observations Recorded.

i. Curriculum

Mono-grade curriculum was taught in multi-grade classes. Three grades were in each classroom and they were taught separately. The teachers were frustrated and had negative perception about multi-grade teaching.

ii. Instructional Strategies

No planning and preparation was observed from the teachers’ side to teach in multi-grade classrooms. Individual learning, group learning, and personal attention to students was also not observed.

iii. Instructional Materials

Textbook and blackboard were the only sources of teaching and learning in the classrooms.

iv. Classroom Management

Learners in both classrooms were sitting in groups, facing blackboard but each grade was taught individually by the teachers. Timetable was not followed strictly as per needs of the students. Discipline was maintained in the classrooms.

v. Teacher Training

Teachers were mostly not trained for multi-grade teaching. They were not considering multi-grade teaching as an effective teaching strategy and were facing a lot of problems due to lack of multi-grade teacher training.

vi. Community Involvement

Not observed
vii. **Basic Facilities**

Drinking water, toilets, and electricity were not provided.

**GOVERNMENT PRIMARY SCHOOL SOHBAT KORONA NOWSHERA**

- Total number of teachers: 4
- Total number of students: 150
- Total number of classrooms: 3
- Combined grades: (i) Nursery and grade I = 62 Learners
  (ii) Grade II and III = 49 learners
  (iii) Grade IV and V = 39 Learners

**Observation Recorded**

i. **Curriculum**

Students in each classroom were sitting in groups but they were taught separately. The same mono-grade curriculum was taught in multi-grade situation. Not much written work was observed. The teachers focus was on the completion for all grade levels and the learners were left behind.

ii. **Instructional Strategies**

Teachers were providing opportunities to students for individual and group learning but they were not able to pay personal attention to each and every student.

iii. **Instructional Materials**

Instructional materials were not available, except black board and textbook.

iv. **Classroom Management**

Timetable was followed strictly but had flexibility in accordance with the needs of the students. Environment was seen conducive for teaching and learning process.

v. **Teacher Training**

Teachers were mostly trained for only primary school teaching but had no experience of teaching in multi-grade classes.

vi. **Community Involvement**
Parents were to some extent communicating with the teachers in educations of their children.

vii. Basic Facilities

Basic facilities were provided, but desk, and benches were available only for grade IV and V.

GOVERNMENT PRIMARY SCHOOL SHPANO KALI NOWSHERA

Total number of teachers: 5  
Total number of students: 276  
Total number of classrooms: 3  
Grades combined: (i) Nursery and grade I were taught in multi-grade and other grades were taught in mono-single grades.

Observations Recorded

i. Curriculum

Nursery and grade I was taught in multi-grade setting while other grades were taught in mono-grade. The teacher of multi-grade setting was confused and frustrated of the teaching setting due to lack of training in multi-grade teaching.

ii. Instructional Strategies

The teacher in multi-grade setting was disturbed and could not manage the heavy class of 74 students. He was unaware of the teaching strategies, how to deal or to keep busy the students in their work.

iii. Instructional Materials

No teaching and learning materials were provided to the school, except textbook and black board.

iv. Classroom Management

Environment was not conducive for teaching and learning.

v. Teacher Training

Teachers were mostly trained for mono-grade teaching and had no experience of multi-grade teaching.
vi. **Community Involvement**
No Community involvement was observed.

vii **Basic Facilities**
Basic facilities were provided to some extent.

**GOVERNMENT PRIMARY SCHOOL NO 2 SAMANDER GARI NOWSHERA**
- Total number of teachers: 14
- Total number of students: 742
- Total number of classrooms: verandah of Janazgah
- Combined grades: individual grades, rather grades were further divided into two sections.

**Observations Recorded**

i. **Curriculum**

Mono-grade teaching prevailed. Each grade was taught by single teacher all the day. Main focus was on the completion of curriculum. Not much written work was done. Not much attention was given to correction and feedback.

ii. **Instructional Strategies**

The teachers could not provide opportunity to students for personal attention. No individual and group learning was observed.

iii. **Instructional Materials**

Practical guidebook, blackboard and textbooks were available as teaching aids.

iv. **Classroom Management**

Classes were overcrowded. It was difficult for teacher to manage the class even in mono-grade teaching. All grades were sitting side by side without any partition. Environment was not conducive for teaching and learning at all.

v. **Teacher Training**

Teachers were mostly trained for primary school teaching. They could not manage the classes due to no partition among the classes.

vi. **Community Involvement**

Not observed
vii. Basic Facilities

Seven hundred and forty two students were seated in a Janazagah. No basic facility was provided, except drinking water.

GOVERNMENT PRIMARY SCHOOL HOTI KHEL NOWSHERA KALAN.
Total number of teachers: 6
Total number of students: 236
Total number of classrooms: 4
Combined grades: (i) Nursery and grade I = 86 students
(ii) Grade II and III = 74 students
Grade V and VI were taught in mono-grade classrooms.

Observations Recorded
i. Curriculum

Medium of instruction was Pashto in the class. Nursery and grade I, and grade II and III were sitting in groups but they were taught separately. Teachers were mostly not happy in multi-grade setting.

ii. Instructional Strategies

Teachers used different strategies of teaching in the classroom. Individual learning and group learning was observed within the resources of the school. Teachers were mostly teaching one grade while grade worked at their own.

iii. Instructional Materials

Only textbook and blackboard were provided as sources of instructional materials.

iv. Classroom Management

Class time was equally divided among the grades and had flexibility in accordance with the needs of the students. Cooperative learning was observed.

v. Teacher Training

Teachers were trained only for mono-grade teaching and had no experience of multi-grade teaching. They could hardly manage the class due to lack of multi-grade teaching.
vi. Community Involvement

Not observed

vii. Basic Facilities

Basic facilities were provided but seating arrangement was insufficient for the students.

GOVERNMENT PRIMARY SCHOOL SHALA KHEL NOWSHERA KALAN

Total number of teachers: 5
Total number of students: 382
Total number of classrooms: 4
Combined grades: (i) Nursery and grade I = 81 students
(ii) Grade II and III = 78 students

Observations Recorded

i. Curriculum

The same mono-grade curriculum was taught. Nursery and grade I were grouped together but taught separately in the same classroom. Teachers were focusing completion curriculum but seemed impossible to complete the course because dealing two grades at the same time.

ii. Instructional Strategies

Teachers had no experience of multi-grade teaching, therefore they frustrated and confused about the situation. The only option to manage the class was the use of stick.

iii. Instructional Material

Teaching materials were not available, except textbook and black board.

iv. Classroom Management

Students in both classroom of multi-grade were sitting in the same classroom. Two separate black boards were fixed on opposite sides for each grade. When they taught have been teaching one grade, the other grade was busy in some activity, yet lack of discipline was observed.

v. Teacher Training
Teachers were not trained only primary school teaching and they did not like to teach in multi-grade setting. They felt a lot of problem in such situational wanted to get rid of multi-grade teaching.

vi  **Community Involvement**
Not observed

vii  **Basic Facilities**
Basic facilities like drinking water, electricity were available but furniture arrangement for teachers and students were not sufficient at all.

GOVT. PRIMARY SCHOOL KESHTIPUL, NOWSHERA
- Total number of teachers: 4
- Total number of students: 218
- Total number of classrooms: 3
- Grades combined: (i) Nursery and grade I = 83 students
  (ii) Grade II and III = 89 students
  (iii) Grade IV and V = 46 students

**Observations Recorded**

i.  **Curriculum**
Two grades were occupied in each classroom but the grades were taught individually in the same classroom. Single grade curriculum was taught in multi-grade setting. Written work was mostly signed and corrections were made in written work. Individual learning and group learning was observed.

ii.  **Instructional Strategies**
Teachers were not properly trained for multi-grade teaching, yet they were making use of several teaching strategies to engage the students.

iii.  **Instructional Materials**
Teaching aids were available to some extent and the teachers were making use of those materials effectively.

iv.  **Classroom Management**
Two grades were sitting in each classroom, facing black board. Time table was followed strictly but flexibility of change was there according to the needs of the students. Discipline was maintained in the classroom.

v. Teachers Training

Although the teachers were trained for mono-grade classes, yet they seemed to have zeal and enthusiasm about multi-grade teaching.

vi. Community Involvement:

It was not observed.

vii. Basic Facilities

Basic facilities were provided to school due to the personal interest of the teachers.

GOVT. PRIMARY SCHOOL KANDI KALA KHEL DISTRICT PESHAWAR

Total number of teachers: 4
Total number of students: 230
Total number of classrooms: 4
Combined grades: (i) Prep and grade I
(ii) Grade II and grade III

Observations Recorded

i. Curriculum

Medium of instruction was Pashto. The same mono-grade curriculum was taught in multi-grade classrooms. Teachers were unwilling to teach in multi-grade setting. No activity had been written work done was insufficient and unchecked.

ii. Instructional Strategies

Teachers used different strategies to manage the class. Individual and groups learning was to some extent observed.

iii. Instructional Materials

Teaching materials were available to some extent and were mostly utilized in the classroom.

iv. Classroom Management
Classroom rules and procedure were developed among the teachers. Older students were cooperating the younger one in their studies. Environment was conducive for teaching and learning. Two grades were adjusted in class and were taught turn by turn.

v. Teachers Training

Teachers were mostly not trained multi-grade teaching but engaged the students effectively. Yet the teachers did not consider multi-grade teaching as an effective teaching strategy due to lack of multi-grade teaching.

vi. Community Involvement

Not observed

vii. Basic Facilities

Drinking, electricity and boundary wall was existed but toilets and furniture was not sufficient in accordance with needs of the students.

GOVERNMENT PRIMARY SCHOOL MASMA PESHAWAR

Total number of teachers: 3
Total number of students: 176
Total number of classrooms: 6
Combined grades: (i) Nursery and grade I= 63 students
  (ii) Grade II and III= 60 students
  (iii) Grade IV and V = 43 students

Observations Recorded

i. Curriculum

Two grades were combined in each classroom and were taught separately. Main focus was on the completion of curriculum. Written work done was signed and correction was made to some extent.

ii. Instructional Strategies

The teachers utilized different techniques of teaching. Individual and group learning was observed. Personal attention of teacher was not observed.

iii. Instructional Materials
Teaching materials were available to some extent and teachers were making use of those teaching materials effectively.

iv. Classroom Management

Two grades nursery and grade I, grade II and III, and grade IV and V were adjusted in groups in each classroom and were taught separately. Teachers were confused to teach two grades at the same time. Students were to some extent involved in activities. Environment seemed to be conducive to teaching and learning.

v. Teachers Training

Teachers were only trained mono-grade teaching and did not like teach in multi-grade setting.

vi. Community Involvement

Parent’s communication with teachers was not observed. However parents and teachers counsel was to some extent working effectively.

vii. Basic Facilities

Basic facilities like toilets and furniture was insufficient in accordance with the needs of the students.

GOVERNMENT PRIMARY SCHOOL KANDI KALU KHEL PESHAWAR
Total number of teachers: 3
Total number students: 169
Total number of classrooms: 5
Combined grades: (i) Nursery and grade I= 68 students
(ii) Grade II and grade III= 52 students, and
Grade IV and V= 49 students

Observation Recorded
i. Curriculum
Two grades were combined together in each classroom but each grade was taught individually. Teachers were frustrated and were not satisfied with their teaching in multi-grade situation. Teachers were mostly focusing textbook. Written work was done to some extent but correction was not done.

ii. Instructional Strategies

Teachers were to some extent making use of teaching strategies. Individual and group learning was observed to some extent but personal attention was not observed at all.

iii. Instructional Material

Teaching materials were available to some extent and teachers were to some extent making use of those materials.

iv. Classroom Management

Two grades were grouped together in each classroom, facing black board. There was enough space for activities in the classrooms. Discipline was maintained in classroom. Timetable was kept flexible for change in according with the needs of the students.

iv. Teachers Training

Teachers were mostly trained mono-grade and felt difficulty to teach in multi-grade teaching training. Teachers did not like teach in multi-grade setting.

v. Community Involvement

Community involvement was to some extent observed. Teachers and parents counsel was working effectively.

vi. Basic Facilities

Basic facilities were available except boundary wall.

**GOVERNMENT PRIMARY SCHOOL NO-1 LALA PESHAWAR**

- Total number of teachers: 7
- Total number of students: 309
- Total number of classrooms: 3
- Combined grades: (i) Nursery and grade I = 111 students
(ii) Grade II and grade III = 97 students
(iii) Grade IV and V = 101 students

Observations Recorded

i. Curriculum

Two grades were adjusted in each classroom but were taught separately. Teachers’ main focus was mostly of completion curriculum. Not much written work was done and was unsigned and unchecked. Teachers were confused and frustrated about the situation.

ii. Instructional Strategies

Teachers strived to make use of different strategies to engage the students but they were helpless due to overcrowded class. No activity, individual learning and group learning was observed. Teachers were trying to just keep the students quite.

iii. Instructional Materials

Teaching and learning materials were not available except black board and textbooks.

iv. Classroom Management

Classes were overcrowded. It was difficult for the teacher to manage the classroom. One grade was taught by the teacher and other grade was controlled by monitor to keep the students silent.

v. Teachers Training

Teachers were mostly not trained multi-grade teaching. They did not considered multi-grade teaching as an effective strategy. They liked to teach in mono-grade setting.

vi. Community Involvement

Community involvement was not observed.

vii. Basic Facilities
Basic facilities were to some extent available.

GOVERNMENT PRIMARY SCHOOL NO-1 CHAMKANI PESHAWAR

Total number of teachers: 12
Total number of students: 790
Total number of classrooms: 8
Combined grades: (i) Nursery and grade I = 115 students
(ii) Grade II and III = 106 students
(iii) Grade IV and V were single grades and each grade was further divided into three sections.

Observations Recorded

i. Curriculum

Mono-grade curriculum was taught in multi-grade classroom. Teachers were focused on the completion curriculum. Not much written work done was observed. In multi-grade classrooms students were mostly found in irrelevant activities.

ii. Instructional Strategies

Teachers had no planning and preparation before teaching to multi-grade classes. The teachers were frustrated and did not know how to deal multi-grade class. No individual and group learning was observed.

iii. Instructional Materials

Appropriate instructional materials were not available for multi-grade teaching.

iv. Classroom Management

Multi-grade classes were overcrowded and it was very difficult to manage the class. Two classes’ nursery and grade I, and grade II and III were grouped in single classrooms facing black board. They were taught turn by turn. One grade was taught by the teacher while other grade was kept silent by monitor.

v. Teachers Training

The teachers were not trained for multi-grade situation at all. They did not considered multi-grade teaching as an effective teaching strategy and did not like to teach in multi-grade teaching.
vi. **Community Involvement**

Community involvement was not observed.

vii. **Basic Facilities**

Basic facilities were to some extent provided.

**GOVERNMENT PRIMARY SCHOOL NO-2 CHAMKANI PESHAWAR**

- Total number of teachers: 19
- Total number of students: 1097
- Total number of classrooms: 13
- Combined grades: Mono-grade teaching setting was observed.

**Observations recorded**

i. **Curriculum**

Medium of instruction was Pashto in the classrooms. Work was distributed subject wise among the teachers. The teachers were anxious about the completion of course but the pace of teaching was slow in accordance with the mental level of the students.

ii. **Instructional Strategies**

Teachers were making use of different strategies to engage the students. Activities, personal attention of teachers and individual learning was observed at all. Group work was observed to some extent.

iii. **Instructional Materials**

Teaching and learning materials were to some extent available and the teachers were to some extent making use of those materials in the classroom.

iv. **Classroom Management**

Classrooms were overcrowded. It was difficult for teachers to manage the class even in mono-grade situation. Environment was not conducive for teaching and learning process at all.

v. **Teachers Training**

Teachers were mostly trained for primary school teaching, yet they could not manage such heavy classes.
vi. Community Involvement

Community involvement was not observed.

vii. Basic Facilities

Basic facilities like drinking water, toilets, electricity were provided but furniture was insufficient in accordance with needs of the students.

GOVERNMENT PRIMARY SCHOOL CHUGHALPURA PESHAWAR

Total number of teachers: 18
Total number of students: 827
Total number of classrooms: 16
Combined grades: single graded classrooms were observe

Observations Recorded

i. Curriculum

Mono-grade curriculum was taught. Each grade taught individually in separate classroom. Much stress was the completion of curriculum, yet the teaching and learning process very slow, at that pace the learners will have to spend two calendar years in one grade.

ii. Instructional Strategies

Teachers were making use of several strategies in their teaching. Collaborative learning, individual learning and personal attention were to some extent observed.

iii. Instructional Materials

Teaching and learning materials were to some extent available in the classroom. Teachers were making use of those materials effectively.

iv. Classroom Management

Classroom rules and procedure were developed jointly among the teacher. Timetable was followed strictly. Environment was conducive for teaching and learning process.

v. Teachers Training

Teachers were mostly trained for mono-grade teaching. Teachers were satisfied with their work and did not like multi-grade situation.
vi. **Community Involvement**

Community involvement was to some extent observed. Parents and teachers counsel was working effectively.

vii. **Basic Facilities**

All basic facilities were available but shortage of furniture was mostly observed.

**GOVERNMENT PRIMARY SCHOOL SARDAR GARI PESHAWAR**

- Total number of teachers: 5
- Total number of students: 260
- Total number of classrooms: 3
- Grades combined: (i) Nursery and grade I = 86 students
  (ii) Grade II and III = 64 students

**Observations Recorded**

i. **Curriculum**

Mono-grade curriculum was taught in multi-grade classroom. Medium of instruction was Pashto. Teachers were anxious about the completion of curriculum and found no opportunity to assess the work done.

ii. **Instructional Strategies**

Nursery and grade I, and grade II and III were grouped together in a single classroom but they were taught separately. One grade was taught by the teacher while other grade worked at their own. Collaborative learning, group learning was observed but individual learning was not observed.

iii. **Instructional Materials**

Appropriate teaching and learning materials were not available at school except the practical guidebook.

iv. **Classroom Management**

Timetable was followed strictly but had flexibility in accordance with the needs of the students. Environment was to some extent conducive for teaching and learning process.
v. Teachers Training

Teachers were mostly not trained for multi-grade teaching. It was difficult for them how to tackle the class. They were frustrated and were not in favor of multi-grade teaching.

vi. Community Involvement

Community involvement was not observed.

vii. Basic Facilities

Basic facilities like drinking water was not provided and desks and benches were inadequate for the students.

GOVERNMENT PRIMARY SCHOOL NO-1 HAROON ABAD KULACHI D.I.KHAN

Total number of teachers: 3
Total number of students: 90
Total number of classrooms: 2
Combined grades: (i) Nursery and grade I=39 students
(ii) Grade II and III= 26 students
(iii) Grade IV and V = 25 students

Observations Recorded

i. Curriculum

Medium of instruction was Saraiki. Two grades were grouped together in each classroom but they were taught separately. The same mono-grade curriculum was taught in multi-grade setting. Most of the written work was checked and corrections were made in written work.

ii. Instructional Strategies

Two grades were combined in each classroom but they were taught separately. Activity based learning, group learning and individual learning was observed but personal attention of teacher to students was not observed.

iii. Instructional Materials

Instructional materials were mostly not available in the classrooms, yet the teachers motivated and had arranged materials from their own side.

iv. Classroom Management
Classroom management was good. Both grades were seated in front of black board and the teacher made use of black board turn by turn for each of the grades. Discipline was maintained in the classroom and environment was conducive for teaching and learning.

v. **Teachers Training**

Teachers were mostly trained for mono-grade teaching but they managed multi-grade classes effectively and efficiently.

vi. **Community Involvement**

Community involvement was not observed.

vii. **Basic Facilities**

Basic facilities were to some extent provided.

**GOVERNMENT PRIMARY SCHOOL NO-2 HAROON ABD D.I.KHAN**

- Total number of teachers: 6
- Total number of students: 4
- Total number of classrooms: 2
  - Combined grades: (i) Nursery and grade I= 4 students

**Observation Recorded**

i. **Curriculum**

Mono-grade curriculum was taught. All four students were grouped in front of teachers. All six teachers were teaching different subjects in different periods.

ii. **Instructional Strategies**

Teachers picked the students up on their way to school. Personal attention of teachers was observed. Activities based learning and group learning was also observed.

iii. **Instructional Materials**

Teaching aids were not available, except a blackboard and textbook.

iv. **Classroom Management**

Classroom management was maintained. Environment was conducive for teaching and learning.
v. Teachers Training

Teachers were not properly trained multi-grade teaching but due to low number of students, the teachers had been able to manage them effectively and easily. The teachers were relaxed and enjoyed their duty.

vi. Community Involvement

Community involvement was not observed.

vii. Basic Facilities

Basic facilities like drinking water, toilets for children, electricity and furniture were not provided at all.

GOVERNMENT PRIMARY SCHOOL RANAZAI KULACHI D.I.KHAN
Total number of teachers: 4
Total number of students: 8
Total number of classrooms: 2
Grades combined: (i) Nursery and grade I = 5 students
(ii) Grade II and III = 3 students

Observation Recorded
i. Curriculum

The same mono-grade curriculum was taught in multi-grade setting. Teachers had enough time to engage each and every student. Teaching and learning process was slow but effective.

ii. Instructional Strategies

The teachers were applying different strategies during teaching. Personal attention of teachers, individual learning and collaborative learning was observed.

iii. Instructional Materials

Teaching and learning materials were not available at all.
iv. Classroom Management

Classroom rules and procedures were developed jointly among the teachers. The environment was conducive for instructions.

v. Teachers Training

Teachers were mostly trained for single grade classes but due to low number of students in class could be managed easily.

vi. Community Involvement

Community involvement was not observed.

vii. Basic Facilities

Basic facilities like toilets, electricity, desk and benches were not provided but drinking water was available to some extent.

GOVERNMENT PRIMARY SCHOOL QADAM KHEL D.I.KHAN

Total number of teachers: 3
Total number of students: 32
Total number of classrooms: 2
Combined grades (i) Nursery and grade I = 13 students
(ii) Grade II and grade III = 11 students
(iv) Grade IV and V = 8 students

Observations Recorded

i. Curriculum

Medium of instruction in classroom was Saraiki. Mono-grade curriculum was taught in multi-grade setting. The teacher’s main focus was on the completion of curriculum. Not much written work was done but was signed and corrections were made in written work.

ii. Instructional Strategies

Teachers were using several teaching strategies in the classroom. Personal attention, individual learning and group work was observed.
iii. **Instructional Materials**

Teaching aids were not available but teachers had developed self made teaching and learning materials and were using those materials effectively.

iv. **Classroom Management**

Two adjacent grades were combined in each class but were taught separately. Timetable was followed strictly; discipline was maintained in the classroom.

v. **Teachers Training**

Teachers were trained primary school teaching (PTC) and had no experience of multi-grade teaching but due to low number of students were managed effectively.

vi. **Community Involvement**

Community involvement was not observed.

vii. **Basic Facilities**

Basic facilities like drinking water, toilets, electricity, and furniture, boundary wall and playground were not provided at all.

**GOVERNMENT PRIMARY SCHOOL HAIDAN D.I.KHAN**

- Total number of teachers: 2
- Total number of students: 58
- Total number of classrooms: 2
- Combined grades (i) Nursery and grade I = 34 students
  (ii) Grade II and III, IV and V = 24 students

**Observation Recorded**

i. **Curriculum**

Mono-grade curriculum was taught in multi-grade classrooms. Medium of instruction was Saraiki. Teachers were anxious about the completion of curriculum. Not much written work was done. Written work was not checked.

ii. **Instructional Strategies**
Teachers were utilizing several teaching techniques but they had no planning and preparation before teaching to multi-grade classroom. The teachers taught one grade while other grades worked at their own.

iii. **Instructional Materials**

Instructional materials were not available at all.

iv. **Classroom Management**

Three grades were combined in a single classroom but they were taught separately. All grades were seated in front of blackboard and were taught turn by turn. Discipline was maintained and environment was fully conducive for teaching and learning process.

v. **Teachers Training**

Teachers were mostly not trained for multi-grade teaching. They did not like to teach in multi-grade situation and did not considered multi-grade teaching as an effective teaching strategy. They preferred single grade situation.

vi. **Community Involvement**

Community involvement was not observed.

vii. **Basic Facilities**

Basic facilities like drinking water, toilets, electricity, furniture, boundary wall and playground were not provided.

**GOVERNMENT PRIMARY SCHOOL LACHRA D.I.KHAN**

- Total number of teachers: 4
- Total number of students: 147
- Total number of classrooms: 3
- Combined grades: (i) Nursery and grade I was single grades
  (ii) Grade II and III = 54 students
  (iii) Grade IV and V = 37 students
Observations Recorded

i. Curriculum

Mono-grade curriculum was taught in multi-grade setting. Medium of instruction was Saraiki. Teachers were in a fix about the completion of curriculum but no possibility of completion of curriculum seemed in multi-grade situation.

ii. Instructional Strategies

Teachers were striving to utilize several teaching strategies in the class to engage the students but lack of planning and preparation was not observed from teacher’s side. Group learning and individual learning was observed to some extent.

iii. Instructional Materials

Teaching and learning aids were not available, except the textbook and blackboard.

iv. Classroom Management

Classroom rules and procedure were developed among the teachers. Two grades were combined in multi-grade classroom but each grade was taught separately. Both grades were seated in front of the blackboard and the teachers used it turn by turn fir each grade.

v. Teachers Training

Teachers were only trained single grade classes and felt difficulty to teach in multi-grade situation. They did not like multi-grade setting at all.

vi. Community Involvement

Community involvement was not observed.

vii. Basic Facilities

Basic facilities were provided but boundary wall and playground were not available.

GOVERNMENT MUNICIPAL PRIMARY SCHOOL JALAR LASHAR ALI D.I.KHAN
Total number of teachers: 1
Total number of students: 35
Total number of classrooms: Verandah of Mosque
Combined grades: (i) Nursery to grade V were grouped together.

Observations Recorded
i. Curriculum

The teacher had been calling the students of each grade. They sit around the teacher and were taught. Due to non-availability of blackboard, the teacher made use of a student notebook for the whole grade. The teacher was frustrated and confused about the curriculum.

ii. Instructional Strategies

The teacher was trying his best to keep the students engage by using different teaching strategies. Group work, individual learning and collaborative learning was observed.

iii. Instructional Materials

Instructional materials were not available at all.

iv. Classroom Management

Nursery to grade V students were combined together, therefore it as to difficult for the teacher to manage the class. Students were grouped grade wise and taught turn by turn.

Teachers training

Teacher was trained for primary school teaching and no experience of teaching in multi-grade setting. He did not like multi-grade teaching.

v. Community Involvement

Community involvement was not observed.

vi. Basic Facilities

Basic facilities were not available, except drinking water.

GOVERNMENT MUNICIPAL PRIMARY SCHOOL BHETI ABAD D.I.KHAN
Total number of teachers: 1
Total number of students: 102
Total number of classrooms: school without sitting in front of a house in open air.

Observations Recorded

i. Curriculum

Students from nursery to grade V were taught in multi-grade situation. Each grade was taught separately. Mono-grade curriculum was taught. Students were mostly involved in irrelevant activities. Teachers were frustrated and confused about the situation, how to deal such a heavy class of different grades.

ii. Instructional Strategies

The teacher was to some extent utilizing several strategies. Individual and group learning was observed to some extent but personal attention of teacher was not possible at all.

iii. Instructional Materials

The only available source of teaching was text-books; even blackboard was not provided to school.

iv. Classroom Management

Students of different grades were sitting in groups. The teachers used to go to grade and taught them in the textbook while other grades were controlled by the monitor to sit silent. Environment was not suitable for teaching and learning.

v. Teachers Training

The teacher was not properly trained for multi-grade teaching. He did not like to teach in multi-grade classes and did not consider it as an effective strategy of teaching.

vi. Community Involvement

Community involvement was not observed.
vii. Basic Facilities

Basic facilities like drinking water, toilets, electricity, and furniture were not provided at all. Even chair for single teacher was not provided.

**GOVERNMENT PRIMARY SCHOOL SHAHEED ABAAD D.I.KHAN**

Total number of teachers: 3
Total number of students: 34
Total number of classrooms: 2
Combined grades: (i) Nursery and grade I = 15 students
               (ii) Grade II and III = 12 students
               (iii) Grade IV and V = 7 students

**Observations Recorded**

i. **Curriculum**

The same mono-grade curriculum was taught in the classrooms. Medium of instruction was Saraiki. Two grades were combined together in a classroom but each grade taught individually. Teacher’s main focus was completion of curriculum. Enough written work was done and corrections were made in the notebook.

ii. **Instructional Strategies**

Teacher had zeal and enthusiasm for teaching and were making use of several teaching strategies in the class. Personal attention, individual learning and collaborative learning observed.

iii. **Instructional Materials**

Instructional materials were not available except textbook and blackboard, yet the teachers had arranged self made teaching materials to make their teaching effective.

iv. **Classroom Management**
Classroom rules and procedure were developed among the teachers. Two grades were sitting in a single classroom but they were taught separately. Discipline was maintained in classroom and environment was observed for teaching and learning process.

v. Teachers Training

Teachers were mostly not trained for multi-grade situation, yet they were committed and were taking personal interest to create an effective multi-grade situation.

vi. Community Involvement

Community involvement was to some extent observed.

vii. Basic Facilities

Basic facilities were to some extent provided to school.

GOVERNMENT PRIMARY SCHOOL KAMRAN ABAD D.I.KHAN
Total number of teachers: 3
Total number of students: 142
Total number of classrooms: 4
Combined grades: (i) Grade I and IV = 64 students
                    (ii) Grade II and III= 55 students
                    (iii) Nursery and grade V = 24 students

Observations Recorded
i. Curriculum

Mono-grade curriculum was taught in multi-grade situation. Medium of instruction was Saraiki. Teachers were mainly focusing completion of curriculum. Not much written was done and was not checked at all.

ii. Instructional Strategies

Teachers were making use of different teaching strategies to manage the class. Personal attention was observed to some extent. Collaborative and group learning was also observed.

iii. Instructional Materials

Instructional materials were not available at all, except textbook and blackboard.
iv. **Classroom Management**

Two grades were grouped together in single classrooms. Both grades were adjusted in the class so that each grade faced blackboard. Timetable was followed according to the needs of the students. There was conducive to environment for teaching and learning.

v. **Teachers Training**

Teachers were mostly trained mono-grade classroom. They did not like multi-grade setup.

vi. **Community Involvement**

Community involvement was not observed at all.

vii. **Basic Facilities**

Basic facilities were to some extent provided.

**GOVERNMENT PRIMARY SCHOOL CHAH MAPAL D.I.KHAN**

Total number of teachers: 4

Total number of students: 184

Total number of classrooms: 3

Combined grades: (i) Nursery and grade I = 66 students

(ii) Grade II and III = 45 students

(iii) Grade V and IV were taught in mono-grade situation.

**Observations Recorded**

i. **Curriculum**

Teachers were mainly focusing on contents. Teaching and learning process was very slow. Not much written work done. Written work was to some extent and corrections were made.

ii. **Instructional Strategies**
Teachers were making use of several strategies. Independent learning and collaborative learning was observed but personal attention of teachers was not observed at all.

iii. **Instructional Materials**

Teaching and learning aids were not provided, except textbook and blackboard.

iv. **Classroom Management**

Nursery and grade I, and grade II and III were taught in multi-grade setup and other grades were taught in single grades. Planning preparation for teaching from teacher was not observed. Timetable in multi-grade setting was utilized in accordance with the needs of the students.

v. **Teachers Training**

Teachers in multi-grade classroom were not happy in the prevailing situation. They were frustrated and did not consider multi-grade strategy as an effective teaching strategy.

vi. **Community Involvement**

Community involvement was not observed at all.

vii. **Basic Facilities**

Basic facilities like electricity, furniture, toilets were not provided at all. Drinking water was to some extent available.

**GOVERNMENT PRIMARY SCHOOL JAN BAZ NARAI MARDAN**

Total number of teachers 3

Total number of students: 146

Total number of classrooms: 2

Combined grades: (i) Nursery and grade I= 47 students

(ii) Grade II and III = 62 students
Observations Recorded

i. Curriculum

Mono-grade curriculum was taught in multi-grade classrooms. Medium of instruction in classroom was Pashto. Teaching learning process was very slow due to slow learning of students. Written work was mostly singed and corrections were made in written work.

ii. Instructional Strategies

Teachers were trying to make use of several teaching and learning techniques to make it effective. But it was difficult for them to manage the class. Individual learning and group learning was observed.

iii. Instructional Materials

Teaching and learning materials were not available at all.

iv. Classroom Management

Multi-grade environment was created by joining to grades in each classroom. Each grade was taught separately. Classroom rules and procedures were developed among the teachers and timetable was followed in accordance with the needs of the learners. Discipline was maintained in classes.

v. Teachers Training

Teachers were not specially trained for multi-grade classroom. They were confused about the situation and did not consider it as an effective teaching strategy.

vi. Community Involvement

Community involvement was not observed.
vii. Basic Facilities

Basic facilities were to some extent provided.

GOVERNMENT PRIMARY SCHOOL ZOR ABAD MARDAN
Total number of teachers: 4

Total number of students: 296

Total number of classrooms: 3

Combined grades: (i) Nursery and grade I= 86 students

(ii) Grade II and III = 74 students

(iii) Grade IV and V were taught in mono-grade situation.

Observations Recorded

i. Curriculum

Medium of instruction was Pashto in the classroom. The same single grade curriculum was taught in the class. Teachers were anxious and confused about the course completion due to slow pace of the students. Written work was far behind the schedule.

ii. Instructional Strategies

Teachers were trying their best making use of different teaching strategies to engage the classroom but to large number of students in class it was difficult to manage the class. Independent learning, collaborative and personal attention of teacher was not observed.

iii. Instructional Materials

Teaching and learning material were not available at all.

iv. Classroom Management
It was difficult to manage the multi-grade class due to overcrowded classrooms. Each grade was taught separately. Discipline was not maintained in classroom at all. Environment was not conducive for teaching and learning process.

v. **Teachers Training**

Teachers were trained for primary school teaching but they had no expertise in multi-grade teaching. Teachers were frustrated and disliked multi-grade situation.

vi. **Community Involvement**

Community involvement was not observed.

vii. **Basic Facilities**

Basic facilities like electricity, toilets for students, furniture were not provided at all. Drinking water was to some extent available.

**GOVERNMENT PRIMARY SCHOOL NO-1 MANGA MARDAN**

Total number of teachers: 4

Total number of students: 166

Total number of classrooms: 3

Combined grades: (i) Nursery and grade I = 56 students

(ii) Grade II and III = 46 students

(v) Grade IV and V were single graded

**Observations Recorded**

i. **Curriculum**
The same mono-grade curriculum was taught in multi-grade setup. Teachers were mostly focused on the completion of curriculum. Teacher worked with one grade while grade was busy with self-activities or reading. Written work was to some extent done and signed.

ii. Instructional Strategies

Teachers were making use of different strategies of teaching. They had identified students with special needs, and special attention was paid to them. Individual learning, collaborative learning and personal attention of teacher were mostly observed.

iii. Instructional Materials

Instructional materials were not available except textbook and blackboard.

iv. Classroom Management

Classroom rules and procedure was developed among the teachers. Timetable was strictly followed but had flexibility in accordance with the needs of the students. Two grades were combined for multi-grade teaching but the grades were taught separately in the same classroom.

v. Teachers Training

Teachers were mostly trained for mono-grade teaching and were not properly trained for multi-grade teaching. They did not like to teach in multi-grade classrooms at all.

vi. Community Involvement

Parents were not communicating the teachers about in education of their children at all. Community was not involved in management and support of multi-grade teaching.

vii. Basic Facilities

Basic facilities were to some extent provided.

**GOVERNMENT PRIMARY SCHOOL PALO DHERI MARDAN**
Total number of teachers: 3
Total number of students: 94
Total number of classrooms: 2

Combined grades: (i) Nursery and grade I = 41 students

(ii) Grade II and III = 34 students

(iii) Grade IV and V = 19 students

**Observations Recorded**

i. **Curriculum**

   Medium of instruction was Pashto in class. Mono-grade curriculum was taught in multi-grade setting. Teachers were mainly focused on completion of curriculum, yet they were far behind the schedule due to slow pace of learners. Grades were taught individually in the class.

ii. **Instructional Strategies**

   Teachers were striving to use several teaching strategies during instruction. Personal attention, group learning and individual learning were mostly observed.

iii. **Instructional Materials**

   Instructional materials were not available at all, excluding textbook and blackboard.

iv. **Classroom Management**

   Environment was mostly conducive for teaching and learning. There was enough space for students to move easily in the class. Classroom rules and procedure were developed among the teachers. Timetable was followed in accordance with the needs of the students.

v. **Teachers Training**

   Teachers were not properly trained for multi-grade environment. They were frustrated and disliked to teach in multi-grade classes.

vi. **Community Involvement**

   Community involvement was not observed at all.
vii. Basic Facilities

Basic facilities like drinking water, toilets, electricity and furniture was provided to some extent.

GOVERNMENT PRIMARY SCHOOL ZANDO DHERI MARDAN
Total numbers of teachers: 2

Total number of students: 108

Total number of classrooms: 2

Combined grades: (i) Nursery, grade I and grade IV = 60 students

(ii) Grade II, III and V = 48 students

Observations Recorded
i. Curriculum

Mono-grade curriculum was provided to teach in multi-grade classes. Teachers were teaching one grade while other grades were working at their own. Curriculum was far behind the specified schedule and there was no possibility of completion of curriculum in the calendar year.

ii. Instructional Strategies

Teachers were using different teaching strategies to make teaching and learning process effective. Individual and group learning was observed.

iii. Instructional Materials

Teaching and learning materials were mostly not available.

iv. Classroom Management

Three grades were combined in each classroom but they were taught separately. One grade was taught by the teachers the others two grades were working by their own. The blackboard was fixed in such a way that could be seen to all students.

v. Teachers Training
Teachers were mostly trained for mono-grade teaching. It was difficult for the teachers to manage multi-grade class. Teachers were disturbed and disliked multi-grade teaching.

vi. Community Involvement

Community involvement was not observed at all.

vii. Basic Facilities

Basic facilities liked drinking water, electricity was provided. But desk and benches for the students were insufficient for the enrolled students.

GOVERNMENT PRIMARY SCHOOL GHUNDA MARADAN
Total number of teachers: 2
Total number of students: 77
Total number of classrooms: 2
Combined grades: (i) Nursery, grade I and grade V= 46 students
(ii) Grade II, III and IV = 31 students

Observations Recorded
i. Curriculum

Mono-grade curriculum was taught in multi-grade classrooms. Teachers were confused about the completion of curriculum because six subjects were taught to each grade and there were three grades combined together in a single for multi-grade teaching. Teacher was working with one grade while other grades were kept busy in some activity.

ii. Instructional Strategies

Teachers were utilizing several instructions during their instruction. Activities, independent learning and collaborative learning were observed.

iii. Instructional Materials
Teaching and learning materials were not available, yet teachers had arranged some self-made materials to make their teaching easy and effective.

iv. Classroom Management

Three grades were grouped together in both classrooms for multi-grade teaching. Timetable was kept flexible according to the needs of the students. Students were seated such that each student in the class could see the blackboard easily. Grades were taught turn by turn. Discipline was maintained and environment was mostly conducive for instruction.

v. Teachers Training

Teachers were not properly trained for multi-grade teaching, yet they managed it effectively due to low number of students. However, the teachers did not like to teach in multi-grade setting.

vi. Community Involvement

Community involvement was not observed at all.

vii. Basic Facilities

Basic facilities like drinking water, electricity, toilets and furniture was to some extent provided.

GOVERNMENT PRIMARY SCHOOL SHAMANDUR KALI MARDAN

Total number of teachers: 3

Total number of students: 117

Total number of classrooms: 2

Combined grades: (i) Nursery and grade I= 42 students

(ii) Grade II and III = 39 students

(iii) Grade IV and V= 36 students
Observations Recorded

i. Curriculum

Medium of instruction was Pashto and the mono-grade curriculum was taught in multi-grade situation. Teachers were anxious about the completion of course but they were far behind the schedule of time. Teachers’ main focus was on contents. Not much written work done was observed.

ii. Instructional Strategies

Teachers were making use of different strategies in classroom. Individual learning and group learning was to some extent observed but personal attention of teachers was not observed at all.

iii. Instructional Materials

Instructional materials were not available, except, textbook and blackboard.

iv. Classroom Management

Classroom rules and procedure were developed among the teachers. Two grades were combined together in every class for multi-grade teaching. Both grades were sitting in such a way that the blackboard could seen easily. Each grade was taught separately in the class. Grades were taught turn by turn. Environment was conducive for teaching and learning.

v. Teachers Training

Teachers were not specially trained for multi-grade situation, so they were frustrated and did not like to teach in multi-grade setting. Teachers were mostly not considering multi-grade teaching as an effective teaching strategy.

vi. Community Involvement

Community involvement was not observed at all.
vii. Basic Facilities

Basic facilities like drinking water, toilets, electricity, and furniture was not provided at all.

GOVERNMENT PRIMARY SCHOOL HASAN KALI MARDAN
Total number of teachers: 4

Total number of students: 176

Total number of classrooms: 3

Combined grades: (i) Nursery and grade I = 67 students

(ii) Grade II and III = 55 students

(iii) Grade IV and V were taught in single grades

Observations Recorded

i. Curriculum

The same mono-grade curriculum was taught in multi-grade classes. Teachers were mainly focused in the completion of curriculum but seemed no chance to be completed in the calendar year due to slow pace of learners. Teachers were looking disturbed and confused to manage the class. No much written work done was observed.

ii. Instructional Strategies

Teachers were striving to make use of difficult techniques. Individual learning and group learning was to some extent observed but personal attention of teacher was not observed at all.

iii. Instructional Material

Teaching and learning aids were not available, except textbook and blackboard.

iv. Classroom Management

Two grades Nursery and grade I, and grade II and III were grouped together for multi-grade teaching. Classroom rules and procedure were developed among the teachers. Timetable was kept flexible to change in accordance with needs of the students. Students in multi-grade
classes were adjusted so that each student could see the blackboard. Each grade was taught separately. Environment was to some extent conducive for instruction.

v. Teachers Training

Teachers had only certification in primary school teaching (PTC) and were not properly trained for multi-grade teaching. They were feeling much difficulty to deal multi-grade class. Teachers mostly disliked multi-grade teaching setup.

vi. Community Involvement

Community involvement was not observed at all.

vii. Basic Facilities

Basic facilities like drinking water, toilets, electricity and furniture were to some extent provided.

GOVERNMENT PRIMARY SCHOOL IBRAHIM KALI MARDAN

Total number of teachers: 3

Total number of students: 148

Total number of classrooms: 3

Combined grades (i) Nursery and grade I = 51 students

(ii) Grade II and III = 56 students

(iii) Grade IV and V = 41 students

Observations Recorded

i. Curriculum

Medium of instruction was Pashto on the classroom. The same mono-grade curriculum was taught in multi-grade situation. Completion of curriculum seemed to be impossible because of multi-grade teaching. Work done was far behind the schedule.

ii. Instructional Strategies
Teachers were making efforts to use different teaching strategies in the classrooms. Individual learning and group learning was observed.

iii. Instructional Materials

Instructional materials were not available except textbook and blackboard.

iv. Classroom Management

Two grades were combined together in a single classroom. Both grades were sitting on ground facing blackboard and were taught separately. Discipline was maintained in classroom and environment was to some extent conducive for teaching and learning process.

v. Teachers Training

Teachers were mostly not trained for multi-grade teaching. It was difficult for them to manage multi-grade classes. They did not like to teach in the prevailing situation and did not considered multi-grade teaching as an effective teaching strategy.

vi. Community Involvement

Community involvement was not observed at all.

vii. Basic Facilities

Basic facilities were to some extent provided.

GOVERNMENT PRIMARY SCHOOL NANG ABAD MARDAN

Total number of teachers: 2

Total number of students: 143

Total number of classrooms: 2

Combined grades: (i) Nursery, grade I and V = 84 students

(ii) Grade II, III and IV = 59 students

Observations Recorded

i. Curriculum
Mono-grade curriculum was taught in multi-grade classes. Teachers were not motivated to teach in multi-grade classrooms. They were mainly focusing on the completion curriculum but it was looking impossible for teacher to complete it because they had to teach three grades at a time. Written work done was insufficient for the required period of time. Medium of instruction was Pashto in the class.

ii. Instructional Strategies

Teachers were trying their best to utilize several teaching and learning technique to make the process effective but it was difficult for them to manage a large number of students in the class. Individual learning, group learning was observed to some extent but personal attention of teachers and activities based learning was not observed at all.

iii. Instructional Materials

Instructional materials were not available, except, the blackboards and textbook.

iv. Classroom Management

Three grades were combined together in both multi-grade classrooms. Two blackboards were fixed on the opposite walls of the classroom. Nursery and grade I was facing one blackboard while grade V was facing the other blackboard. Nursery and grade I was taught jointly while grade V was taught separately in the same classroom. For grade II, III and IV, there was a single blackboard to be used. Grades were seated in such a way that each student can see the blackboard. Grades were taught one by one by the teachers. When the teacher was teaching one grade, others grades were kept busy in self activity. Conducive environment for instruction was not observed at all.

v. Teachers Training

Teacher in multi-grade classes were only trained for single grade class teaching and they had no experience how to manage multi-grade classes. They were de-motivated and frustrated of
the current situation. They preferred to teach in single graded classes rather to teach in multi-grade classes. They did not consider multi-grade teaching as an effective teaching strategy.

vi. Community Involvement

Community involvement was not observed in multi-grade school.

vii. Basic Facilities

Basic facilities were to some extent provided.

GOVERNMENT PRIMARY SCHOOL RAJOYA ABBOTABAD

Total number of teachers: 5
Total number of students: 211
Total number of classrooms: 5

Combined grades: Nursery and grade one were combined for multi-grade teaching while other grades were taught in single graded classrooms.

Observations Recorded

i. Curriculum

Mono-grade curriculum was taught in multi-grade setup. Teachers were mainly focused on content reading. Curriculum was followed slowly according to the mental level of the learners. Not much written work done was observed.

ii. Instructional Strategies

Teacher was making use different strategies of teaching to manage the class. Individual learning, and group learning was to some extent observed but personal attention of teacher and activity based learning was not observed at all.

iii. Instructional Materials

Appropriate teaching and learning materials were not available at all.

iv. Classroom Management
Nursery and grade I was combined together for multi-grade teaching but most of the time was given to grade I. Students were sitting in class facing blackboard and grades were taught separately. Discipline was not maintained in class at all and environment was not conducive for teaching and learning due to overcrowd class of 84 students.

v. Teachers Training

Teacher was not trained for multi-grade teaching at all. He looked disturbed and confused about the situation and disliked to teach in multi-grade situation. He did not consider multi-grade teaching as an effective strategy of teaching.

vi. Community Involvement

Community involvement was not observed, however parents and teachers counsel was to some extent working effectively.

vii. Basic Facilities

Basic facilities like drinking water, electricity, toilets and furniture were to some extent provided.

GOVERNMENT PRIMARY SCHOOL BALOLIA ABBOTABAD
Total number of teachers: 3
Total number of students: 97
Total number classrooms: 2
Combined grades: (i) Nursery and grade I= 37
(ii) Grade II and III = 31
(iii) Grade IV and V= 29

Observations Recorded

i. Curriculum

Medium of instruction in the classroom was Hindko. The same mono-grade curriculum was taught in multi-grade situation. Teachers were mostly anxious about the completion of
curriculum. Contents and written work done was in accordance with the timetable. Written work done was signed and corrections were made accordingly.

ii. Instructional Strategies

Teachers were mostly highly qualified and they were taking keen interest in their jobs. They were making use of different teaching techniques to manage their classes. They were encouraging for individual and cooperative learning. Personal attention of teachers and activity based learning was to some extent observed.

iii. Instructional Materials

Teaching and learning aids were not provided at all, yet the teachers had arranged self-made teaching materials to make their teaching effective for themselves and to make easy it for the students to learn.

iv. Classroom Management

To create multi-grade situation, two grades were combined together in each classroom. Both grades in each classroom were sitting in a way that could see the blackboard. But grades were taught individually in the same classroom. Timetable was kept flexible to change in accordance with the needs of the students. Discipline was maintained in the classroom. Environment was mostly conducive for instruction.

v. Teachers Training

Teachers were mostly trained for mono-grade classes but were motivated and enthusiastic to teach in the prevailing situation. They could manage the class easily.

vi. Community Involvement

Community involvement was to some extent observed.

vii. Basic Facilities
Basic facilities like drinking water, electricity, and toilets were to some extent provided but furniture was not provided at all.

**GOVERNMENT PRIMARY SCHOOL DHAM TOR ABBOTABAD**

Total number of teachers: 2

Total number of students: 106

Total number of classrooms: 2

Combined grades: (i) Nursery, grade I and II = 68 students

(ii) Grade III, IV and V = 48 students

**Observations Recorded**

**i. Curriculum**

Mono-grade curriculum had been teaching in multi-grade classroom. Teachers were not been able to teach three grades at a time, they were frustrated of the situation. Medium of instruction was Hindko in the classroom. Work done was far behind the schedule work to be done.

**ii. Instructional Strategies**

Teachers were utilizing several teaching strategies to make their teaching effective but due to overcrowded classes, it was difficult to manage the classes. Individual learning, group learning and personal attention of teachers were not observed. Story telling method was found effective in the classes.

**iii. Instructional Materials**

Instructional materials make the work effective for the teachers and help the students to understand easily but instructional materials were not available, except, textbook and blackboard.

**iv. Classroom Management**

Three grades were combined together in each classroom. For example, Nursery, Grade I and grade II were grouped together in one classroom while grade III, IV and V were adjusted in
other classroom for multi-grade teaching. Classroom rules and procedure were developed among the teachers. Grades were taught separately. Students were seated in a way that blackboard was visible to each student in the grades. Teachers find it hard to manage the class. Environment was to some extent conducive for teaching and learning process.

v. Teachers Training

Teachers were not specially trained for multi-grade situation; therefore, they did not like the prevailing multi-grade teaching. They did not consider multi-grade teaching as an effective teaching strategy.

vi. Community Involvement

Community involvement was not observed at all. Parents did not communicate the teacher about their children education, nor did any prominent personality visit the school to solve the problems for multi-grade schools.

vii. Basic Facilities

Basic facilities like drinking water, electricity and toilets were to some extent provided but desks, benches and ceiling fans were not provided at all.

**GOVERNMENT PRIMARY SCHOOL NAWAN SHER ABBOTABAD**
Total number of teachers: 4

Total number of students: 167

Total number of classrooms: 3

Combined grades: (i) Nursery and grade I = 63 students

(ii) Grade II and III = 41 students

(iii) Grade IV and V were taught in single graded setup.
Observations Recorded

i. Curriculum

The same mono-grade curriculum was in placed for multi-grade classes. Medium of instruction was Hindko in multi-grade class. Teachers were in a fix how to complete curriculum in stipulated time because the process of teaching was slow pace due to the level of the learners. The teachers had to teach two grades in each class and each grade had to teach six subjects. In spite of making efforts, it was difficult for teachers to manage the class.

ii. Instructional Strategies

Multi-grade teaching demands several instructional strategies to use for an effective teaching and learning process. Teachers need to be properly trained for the phenomena but it was observed that teachers were mostly not properly trained for multi-grade teaching. However, efforts were made the teachers to utilize several teaching strategies in their instruction. Group learning, individual learning and activity based learning was to some extent observed.

iii. Instructional Materials

Classroom rules and procedure was developed among the teachers. Timetable was kept flexible to change in accordance with the needs of the students. Two grades were combined together facing blackboard were seated but each grade was taught separately. Discipline was maintained in the classroom and environment was to some extent conducive for instruction.

iv. Teachers Training

Teachers were mostly not properly trained for multi-grade situation. Therefore, they did not like the prevailing multi-grade teaching. They were frustrated and worried about the current multi-grade situation. They disliked multi-grade teaching as compared to mono-grade teaching. They did not think that multi-grade as an effective teaching strategy.

v. Community Involvement
Community involvement was not observed at all.

vi. Basic Facilities

Basic facilities such as drinking water, electricity and toilets were to some extent but furniture was not provided at all.

GOVERNMENT MUNICIPAL PRIMARY SCHOOL MAIRA RAHMAT KHAN ABBOTABAD

Total number of teachers: 9
Total number of students: 347
Total number of classrooms: 6

Combined grades: (i) Nursery and grade V = 67 students
               (ii) Grade I and IV = 62 students
               (iii) Grade II and III = 54 students

Grade VI and VII were taught with subject wise distribution of work among the teachers.

Observations Recorded

i. Curriculum

Mono-grade curriculum was taught in multi-grade setup. Medium of instruction in the combined classes was mostly Hindko. Teachers were teaching with slow pace, so that students may learn something not just to complete the course. Written work done was mostly singed and corrections were made in written work.

ii. Instructional Strategies

Teachers were mostly exercising several teaching strategies during their instruction. Activity based learning, cooperative learning, group learning and individual learning was to some extent observed but personal attention of teachers was not observed at all.

iii. Instructional Materials
Instructional materials were to some extent available and were used effectively in the classes.

iv. Classroom Management

Primary level grades (Nursery to grade V) were in multi-grade setting. Two grades were grouped together in each classroom, facing blackboard. But each grade was taught individually. Teacher’s main focus was higher level of grades such as grade IV and V. grade VI to grade VIII taught to subject wise distribution of work. Discipline was to some extent maintained in the classes.

v. Teachers Training

Primary school teachers were mostly not properly trained for multi-grade classes. Teachers in multi-grade setup of frustrated with the complex situation in the class. They did not like to teach in multi-grade classes. They preferred single graded classes.

vi. Community Involvement

Community involvement was not observed at all.

vii. Basic Facilities

Basic facilities were to some extent provided.

GOVERNMENT PRIMARY SCHOOL MANROJ ABBOTABAD
Total number of teachers: 4
Total number of students: 158
Total number of classrooms: 3
Combined grades: (i) Nursery and grade I = 49 students
              (ii) Grade II and III = 46 students
Grade IV and V were taught in mono-grade setting.
Observations Recorded

i. Curriculum
Medium of instruction was mostly Hindko in the classrooms. The same mono-grade curriculum was taught in multi-grade setting. No planning and preparation of teachers was observed in the classrooms. Teachers were mainly focused on completion of the course, yet they were far behind the schedules.

ii. Instructional Strategies

Teachers were mostly making use of different teaching strategies to make the instruction effective. Individual learning and group learning were observed to some extent.

iii. Instructional Materials

Instructional materials were not available, except, blackboard and textbooks.

iv. Classroom Management

Classroom rules and procedure were developed among the teachers. Two grades were grouped together for multi-grade teaching. Both grades were grouped arranged in a way that could see the blackboard easily. Timetable was kept flexible to change in accordance with needs of the students. One grade was taught by the teachers while other grade was engaged in self activity. Environment was to some extent conducive for teaching and learning process

v. Teachers Training

Teachers were mostly trained for single grade classroom and had no experience of multi-grade teaching; therefore, it was difficult for them to handle the class effectively. They were discouraged and frustrated of multi-grade situation. They preferred mono-grade teaching rather than to teach in multi-grade setting.

vi. Community Involvement

Parents and teachers counsel was to some extent working effectively.
vii. Basic Facilities

Basic facilities like drinking water, electricity were provided but toilets and furniture for students inadequate.

GOVERNMENT PRIMARY SCHOOL GULIBEEN AbbOTABAD
Total number of teachers: 4
Total number of students: 158
Total number of classrooms: 3
Combined grades: (i) Nursery and grade I = 51 students
(ii) Grade II and III = 36 students
Grade IV and V were taught in mono-graded classrooms.

Observations Recorded
i. Curriculum

Mono-grade curriculum was adopted in multi-grade setup. Medium of instruction was mostly Hindko during instructions. Work done of the teachers was behind the scheduled work to be done due to double graded teaching and slow pace of learners.

ii. Instructional Strategies

Teachers were applying several teaching strategies during their instruction. Individual learning and group learning was to some extent observed.

iii. Instructional Materials

Excluding blackboard and textbook, other teaching and learning materials were not available at all.

iv. Classroom Management

Classroom rules and procedure were developed among the teachers. Two grades were grouped together in each classroom for multi-grade teaching but the grades were taught separately in the same classroom. Students of both grades were seated in front of the blackboard.
Discipline was mostly maintained in class and conducive environment for teaching and learning was to some extent observed.

v. Teachers training

Teachers were mostly trained for mono-grade teaching and were not properly trained for multi-grade teaching; therefore, they were facing a lot of difficulty to manage the class. They were not agreed at all to teach in the prevailing situation of multi-grade setup.

vi. Community Involvement

The involvement of community in management and support of multi-grade teaching was not observed at all.

vii. Basic Facilities

Basic facilities such as drinking water, toilets, electricity, and furniture were to some extent observed.

GOVERNMENT PRIMARY SCHOOL BASALI ABBOTABAD
Total number of teachers: 5
Total number of students: 201
Total number of classrooms: 3
Combined grades: (i) Nursery and grade I = 64 students
Other grades were taught in single graded classrooms.

Observations Recorded

i. Curriculum

Medium of instruction was mostly Hindko in the classroom. The same mono-grade curriculum was taught in multi-grade environment. Contents and written work was not much done due to double graded class and slow pace of the learners.

ii. Instructional Strategies
Teacher was making efforts to use several teaching strategies in his instruction. Individual learning and group learning was to some extent observed but personal attention and collaborative learning was not observed at all.

iii. Instructional Materials

Teaching and learning materials were not available at all, excluding textbook and blackboard.

iv. Classroom Management

Classroom rules and procedure were developed among the teachers. Two grades were grouped together in each class for multi-grade teaching. Blackboard was fixed in the classroom in a way that it was visible to each student of both grades.

v. Teachers Training

Teacher in multi-grade classroom was trained for mono-grade teaching and was not properly trained for multi-grade class that is why he could not manage the class effectively and felt frustration and discouragement in the class.

vi. Community Involvement

Parents and other prominent personality of the locality were not involved in the management and support of multi-grade teaching.

vii. Basic Facilities

Basic facilities were to some extent provided.

GOVERNMENT PRIMARY SCHOOL MAIRA MANDROJ ABBOTABAD
Total number of teachers: 3
Total number of students: 153
Total number of classrooms: 3
Combined grades: (i) Nursery and grade I = 61 students
Observations Recorded

i. Curriculum

Mono-grade curriculum was taught in all three classes of multi-grade setting. The teachers struggling to complete the courses in the given time of period but due to slow pace learners it was mostly not possible. Teachers felt uncomfortable in multi-grade classes.

ii. Instructional Strategies

Teachers were mostly making use of different teaching techniques in the classroom. Individual learning and group learning were to some extent observed but personal attention was not observed at all.

iii. Instructional Materials

Instructional materials were not provided at all, excluding the textbooks and blackboards.

iv. Classroom Management

Two grades were combined together in each class for multi-grade teaching. Blackboard was fixed in classroom in a way that it was visible to each student of both grades. Grades were taught separately. When the teacher was teaching one grade, the other grade was kept busy in some activities such as reading, memorizing or writing etc. Discipline was mostly maintained in the class.

v. Teachers Training

As teachers were mostly not trained for multi-grade situation, therefore, they were lacking competency in managing their classrooms. Teachers were not satisfied in multi-grade setting and preferred mono-grade classrooms.

vi. Community Involvement

Community involvement was not observed at all.
vii. Basic Facilities

Basic facilities like drinking water, toilets, electricity, and furniture was to some extent provided to school.

GOVERNMENT PRIMARY SCHOOL KAKOOL ABBOTABAD
Number of teachers: 4
Number of students: 176
Number of classrooms: 3
Combined grades: (i) Nursery and grade I= 66 students
    (ii) Grade II and III = 51 students
    (iii) Grade IV and V were taught in single graded situation.

Observations Recorded
i. Curriculum

Medium of instruction was mostly Hindko in the class. Mono-grade curriculum was taught in multi-grade situation. Teachers were anxious about the completion of curriculum but they were far behind the scheduled work to be done.

ii. Instructional Strategies

Teachers were making efforts to use different teaching strategies in the class. Individual learning and group learning was to some extent observed.

iii. Instructional Materials

Teaching and learning materials were not available in the classroom except textbooks and blackboards.

iv. Instructional Management

No planning and preparation from the teacher’s side was observed. Two grades were combined together for multi-grade teaching but each grade was taught separately. Timetable was kept flexible to change in accordance with the needs of the students.

v. Teachers Training
Teachers were mostly trained for single graded classes, therefore, incompetency of teachers was observed in the class. They were not motivated and did not like to teach in multi-grade situation.

vi. **Community Involvement**

Community involvement was not observed at all.

vii. **Basic Facilities**

Basic facilities like drinking water, electricity, toilets, and furniture were to some extent provided to school.

**DISCUSSION**

Analysis of this study indicated that multi-grade teaching is widely prevailed in the remote areas of the province of Khyber Pukhtoonkhwa (Pakistan). The analysis of data collected through Questionnaires from Primary School Teachers (PSTs) and Professional Support Staff, And researcher’s self-observation Acknowledged and supported, the APEID report (UNESCO/APEID,1989) which pointed out that multi-grade teaching has been neglected by the education department. Primary curriculum documents and their related list of minimum learning competencies have been designed specifically for single-graded classrooms, but they are regularly and frequently used for multi-grade classes. Analysis of this study also show that prescribed curriculum for mono-grade classroom is taught in multi-grade situation. Berry (2001) elaborates that the conceptual skills required for the prescribed curriculum are too greater for the teacher to cope with, which create problems and concerns for teachers in multi-grade classroom. Joubert (2010) also has the same sentiments, saying that teachers in multi-grade situation face a considerable barrier in managing instruction of different grades, they need to know much more about the content of primary education for more than one grades and in every subject area. The
findings of the current study show that the same curriculum is mostly not completed in the given time of the academic year, due to the lengthy syllabus of single-graded classes. Evidence of findings show that multi-grade teaching is not officially recognized and not much attention is paid in this context.

As for teachers training is concerned, the findings of the study indicate that teachers were mostly not trained for multi-grade teaching which becomes a challenge for teachers’ development. It was observed that teachers in multi-grade were frustrated and demotivated toward multi-grade classrooms. Mansoor (2011) shares the sentiments that multi-grade teachers require special training and learning materials without which it becomes difficult for teachers to handle the multi-grade classes. In such scenario the students feel neglected and get bored easily which in turn affects their learning levels. It create problems if not implemented properly (Mansoor, 2011). Little (2001) is of the view that the report on Pakistan mentions that of the problem is a lack of teachers trained to handle multi-grade classrooms; this issue is not re-addressed in the account of teachers training. This research study also verifies Little’s (2001) report. Ames (2004) says that it is very controversial in the context of multi-grade teaching, since teachers learning occurs at different levels in diverse fields and contexts. Ames (2004) shares his sentiments that isolated and isolating condition of work and poverty of the communities served by multi-grade classrooms reinforces teachers’ negative perception toward multi-grade teaching and so was observed by the researcher in this research study. Furthermore, the results of this study indicate teachers are not willing for the realities of multi-grade situation, teachers just teach because that is expected from them. Studies conducted on multi-grade teaching show the lack of teacher’s preparedness for multi-grade teaching (Kyne, 2005; Lingam, 2007; Little, 2005). Little (2005) is of the opinion that pre-service and in-service teachers training are vital for
multi-grade setting. Lingam (2007) and (Mason & Burn, 1997) also emphasized that for effective multi-grade teaching, the teacher must be better trained. Chandra (2004) has the same sentiments about teachers training in multi-grade classroom, he says that the need for ongoing professional development enable the teachers to teach effectively in multi-grade scenario. Brown (2008) is of the view that teacher education programs cannot continue a dominant focus on mono-grade teaching while multi-grade teaching is practiced in schools. The scarcity of teaching materials is another matter of concerned.

The finding of this study has shown that appropriate teaching and learning materials were not available in multi-grade schools. Coetzee et al (2008) pointed out that the provision of appropriate teaching materials is a key aspect in managing in multi-grade classes. Teaching and learning aids are an integral part of successful instruction in any teaching context. Instructional materials are often the lens through which students view the learning area and the lesson (Coetzee et al, 2008). Teachers in multi-grade settings need to be provided with appropriate, relevant and updated instructional materials, if effective instruction is to be attained. The analysis of this research shows that Quasi multi-grade curriculum was mostly observed. The teacher was teaching one grade while other grade or grades work at their own. Other grade or grades were kept busy by the teacher in self-study or involved in some activities. The literature implies that teacher prefer mono-grades because multi-grade classrooms need more preparation, planning, organization and work, clearing for wide range of abilities and maturity, less time for remediation and for meeting students individual needs, less time for reflection on teaching, lack of relevant teachers professional training and less satisfaction with their work (Little, 2005; Mason & Burn, 1995).
The results of this study indicate that the teachers in multi-grade classes were mostly unable to manage the classes effectively. Titus (2004) is of the view that management is an essential task of the classroom teacher and this function of teacher is more important in multi-grade context. Raj (2014) identifies that the aim of management is to plan, organize, lead and control the instructional process in such a way that the learner will get maximum benefits from the process. Du Plessis et al (2011) explain that classroom makes many demands on teacher while managing it. The teacher is fully responsible for all types of happening in classroom. Kyne (2005) argues that the teacher in multi-grade setup have to teach several grades at a time that is available for mono-grade teacher to teach one grade level. From the findings of this study, it was found that class rules and procedure were developed collaboratively among the teachers, and timetable was mostly kept flexible to change in accordance with the needs of the students. Raj (2014) has the same sentiments that multi-grade schools need to be very flexible in the management of classrooms to fit particular teaching situations, the physical environment, and the composition of classes.

Muthayan (1999) is of the view that parents’ support and involvement is essential for multi-grade teaching. This approach is consistent with the curriculum policy guidelines which invited parents to be active partners in education of their children, and to take part in the life of the classroom and the school in a variety of ways. Analysis of this research study are against from the sentiments of Muthayan’s report, this study shows that neither parents communicate the teachers in education of their children nor community is involved in the management and support of multi-grade teaching. Titus (2004) share the same sentiments that the communities in which multi-grade schools are located often do not see the value of education, and often speak different language from the “officials”. Titus (2004) recommends the involvement of communities in the
life of the school as a strategy to build ties with the school, and implies that parents can be asked to visit the school as a resource, or the school might extent the curriculum out into the community, and the teacher must be trained in approaches that would help to develop relation between the school and community (Titus, 2004).
Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The purpose of the study was to find out the impact of multi-grade teaching on students’ performance at elementary level in the province of Khyber Pukhtoonkhwa. Multi-grade teaching is an educational setting where two or more grades are taught by a single teacher at the same time in the same classroom. The researcher conducted a survey study to achieve the following objectives: (1) to investigate whether the teachers are properly trained for multi-grade teaching; (2) to find out whether the government facilitates multi-grade schools in Khyber Pukhtoonkhwa; and (3) to investigate the issues and challenges of multi-grade classrooms.

Fifty District Education Officers (male and female), Fifty Deputy District Education Officers (male and female), 150 Assistant District Education Officers as Professional Support Staff, 77,452 Primary School Teachers (PSTs), 2,842,776 students of government primary schools, and 23,073 public sector primary schools in the province of Khyber Pukhtoonkhwa constituted the population of the study. Fifty government primary schools, ten each from districts Nowshera, Peshawar, Mardan, D.I. Khan, and Abbotabad, 150 Primary School Teachers, thirty each from the above mentioned districts, Forty from Professional Support Staff, Eight each from the mentioned districts were selected through purposive sampling. Assumptions were tested that multi-grade teaching improves social interaction among the students and teachers in multi-grade schools are not properly trained for multi-grade teaching. The researcher personally collected data through closed-ended three point (Mostly, To some extent, and Not at all) rating scale questionnaires one each for Primary School Teachers (PSTs) and Professional Support Staff, and a Checklist for direct observation. The collected data were tabulated and analyzed through
Statistical tools of Percentage and Chi-square. Assumptions were tested, conclusions were drawn, and recommendations were made.

5.2: CONCLUSIONS

In the light of data analysis and findings, the researcher reached the following conclusions.

1 Conventional mono-grade curriculum was taught in multi-grade situation. The curriculum developed for each grade consisted of six subjects and a large number of chapters were included in each subject so, it was more difficult for a single teacher to teach more than one grades in the allotted time of period that was the reason that course was not completed in the given time of academic year.

2 Teachers in multi-grade setting were not properly trained for multi-grade classrooms, therefore, they were found frustrated and de-motivated towards multi-grade teaching.

3 Multi-grade teaching is not officially recognized and there is no support and facilitation from the government side for multi-grade schools, therefore, multi-grade teaching is not implemented in its true sense and spirit.

4 The researcher reached the conclusion that due to overcrowded classrooms, it becomes difficult for the primary school teachers to pay individual attention to each and every student.

5 The teachers were not teaching a theme to all grades at the same time, so the researcher came to the conclusion that curriculum was not sequenced both horizontally and vertically.

6 It was concluded that in spite of lack of teachers training in multi-grade teaching, the teachers were making efforts to provide opportunity to students for individual learning,
group learning and collaborative learning. During observation it was known that the senior students were mostly helping the junior ones in their study which indicated towards the improvement of social interaction.

Instructional materials play an important role in teaching and learning process, and it is considered as an integral part of multi-grade teaching but instructional materials were mostly not available for effective teaching and even if there were some materials available, they were mostly outdated and irrelevant to the current curriculum, therefore, in the prevailing situation one cannot expect effective teaching and learning in multi-grade classrooms. The existing scenario caused frustration and burden for the teachers and they disliked multi-grade situation and preferred mono-grade classroom for teaching.

Multi-grade teaching is not adopted as an effective teaching strategy but it is adopted by necessity in Pakistan because of economic and demographic problems.

It was found that there was no proper supervision and assessment of multi-grade teaching.

The researcher observed the imbalanced ratio of teachers and students, in densely populated area is high while in scarcely populated areas this ratio is very low.

5.4 RECOMMENDATIONS

In view of conclusions, the policy makers, and curriculum developers should keep in view the following recommendations for an effective multi-grade teaching:

1. Multi-grade teaching should be officially recognized in Pakistan and government should give special attention to multi-grade school. Multi-grade schools must be
properly supported and facilitated by the government. The government must arrange special workshops and seminars for the improvement of multi-grade school.

2. It is further recommended that the teachers in multi-grade situation must be equipped with special multi-grade teacher training through in-service training programs to overcome the challenges and problems of multi-grade teachers.

3. The teachers in multi-grade classrooms have to teach more than one grade at a time as compared to mono-grade classrooms, so the teachers in multi-grade setting must be entertained with special incentives like bonus or more salary than those teachers who are teaching in mono-grade classrooms. It will help to overcome the frustration of teachers and new zeal and enthusiasm will produce among the teachers for multi-grade classes.

4. It is recommended that there should be a separate curriculum for multi-grade teaching which should be both vertically and horizontally sequenced. In this way the teacher will find opportunity for thematic teaching by combining several grades for a common theme teaching. It will reduce the labor of the teachers and they will find opportunity for planning and better preparation before going to teach in multi-grade classrooms.

5. It is also recommended that the curriculum must be activity based and students centered, more and more activities must be included in the curriculum, so that the students may find opportunity for individual learning, group learning, independent learning and cooperative learning in the classroom where the role of teacher must be just like a facilitator. In such scenario the older students will help the younger ones and social interaction among the students of the different grades will improve.
6. Appropriate instructional materials must be provided to each multi-grade school. These materials must be included small library, different types of relevant charts, pictures, and other objects for activities.

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**Annexure -A**

**Questionnaire for Primary School Teachers (PSTs)**

**Topic:** The impact of Multi-grade teaching on students’ performance at elementary level in Khyber Pukhtoonkhwa.

**NOTE:** These information are collected for Research purpose only and the collected data will be kept top secret. The respondents are requested to provide facts honestly and correctly. The questionnaire is consisted of three options “Mostly”, “To some extent” and “Not at all”. The respondent has to choose one of the given option for each statement and tick the relevant box.

Name of District: ------------------------ Name of School: -------------------------------

Name of Teacher (Optional)-------------------------- Educational Qualification:-----------------

Professional Qualification:---------------------- Age: ---------------- Length of Service:------------------

Male/Female:------------------ Distance between home and School:----------------------

Teachers Training Program last attended in the year:-----------------------------------------------

**1: CURRICULUM**

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The curriculum is up to the level of the students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The curriculum is vertically integrated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The curriculum is fulfilling the needs of the society</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The curriculum is in psychological sequence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The conventional school curriculum addresses the requirements of Multi-grade classrooms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The activities included in the curriculum are practicable in Multi-grade classroom</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The curriculum is updated to the needs of the modern world.

The curriculum is flexible to change.

The curriculum is completed in the given time of the academic year.

The curriculum designed for Mono-grade teaching is taught to Multi-grade classrooms.

2: INSTRUCTIONAL STRATEGIES

<table>
<thead>
<tr>
<th>Serial no</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The teacher develops a wide range of teaching strategies in Multi-grade classroom.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The teacher provides opportunity to learners for personal attention.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The teacher teaches one grade while other grades work on its own.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The teacher teaches a theme to all grades at the same time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The teacher considers learners’ individual differences when planning for instructions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The teacher provides opportunity to students collaborative learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The teacher also provides opportunity to students for individual learning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Students are assessed on daily basis.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3: INSTRUCTIONAL MATERIALS

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Appropriate teaching and learning materials are available for Multi-grade teaching</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>2</td>
<td>Teachers have access to these materials to support their preparation</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>3</td>
<td>The teaching materials are relevant to current contents</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>4</td>
<td>Teachers have practical guidebooks at their school</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>5</td>
<td>The teachers make proper use of instructional materials when teaching</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
</tbody>
</table>

### 4: TEACHERS TRAINING

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The teacher is trained for Primary School Teaching(PST)</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>2</td>
<td>The teacher is also trained for Multi-grade Teaching(MGT)</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>3</td>
<td>Multi-grade Teaching needs more preparation and planning</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>4</td>
<td>Teacher likes to teach in Multi-grade setting</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>5</td>
<td>Teachers consider Multi-grade teaching more effective than Mono-grade teaching</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>6</td>
<td>Government provides support and facilitation for Multi-grade teaching</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
<tr>
<td>7</td>
<td>A system is existing for the assessment of teaching</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
</tr>
</tbody>
</table>
and learning process
کثیر الدرجاتی تدریس کی لئے جائزہ کا موثر نظام موجود ہے۔

8 The teachers arrange group learning for students
اساتذہ طلبا لئے گروہی تعلیم کا انتظام کرتے ہیں۔

9 The teachers also make arrangement for individual learning
اساتذہ طلبا لئے انفرادی تعلیم کا بھی انتظام کرتے ہیں۔

5: CLASSROOM MANAGEMENT

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The timetable is followed strictly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>وقت نامہ پر سختی سے عملدرآمد کیا جاتا ہے۔</td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>The timetable is flexible in accordance with the needs of the students</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>وقت نامہ طلبا/طالبات کی ضروریات کے لکھداری سے۔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Class rules and procedure are developed collaboratively among the teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>جماعتی قواعد اور طریقہ، کار اساتذہ کے بہمی تعاون سے تیار کیا جاتا ہے۔</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Discipline is maintained in the classroom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>کمرہ جماعت میں نظم ونسق قائم ہے۔</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>Most of the time monitor supervises one grade when the teacher teaches to other grades.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>مانیٹر کودوسری جماعت کو ذمہ داری سونبی جاتی ہے۔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>استاد کثیر الدرجی جماعت پرھاتی ہو۔</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td>The monitor role is to keep the students quiet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>مانیٹر کا کام طلباء/طالبات کو خاموش کرنا پڑتا ہے۔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The older students cooperate the younger ones in their work</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>عمر میں برے طلبا/طالبات جھوٹی عمر کے طلباء/طالبات کیساتھ تعاون کرتی ہیں۔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>The teaching and learning environment is conducive to academic process</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>درس و تدریس کا ماحول تعليمی عمل کے لئے موزون ہے۔</td>
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<td></td>
</tr>
</tbody>
</table>

6: COMMUNITY INVOLVEMENT

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Parents involvement is important for Multi-grade teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>کثیر الدرجاتی درس و تدریس میں والدین کی شمولیت ام بوتنی پڑتا ہے۔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Community is involved in management and support of Multi-grade environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>سماج(معاشرہ) کو کثیر الدرجی تعلیم کے ماحول کے انتظام میں شامل کیا ہے۔</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>Parents communicate the teachers in education of their children والدین بچوں کی تعلیم کے بارے میں اساتذہ سے رابطہ رکھتے ہیں.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4</td>
<td>Prominent personalities visit the school to solve local problems of the school</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Parents and Teachers Counsel (PTC) works together effectively والدین اور اساتذہ کا کونسل (PTC) موثر انداز میں کام کرتا ہے</td>
<td></td>
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</tbody>
</table>

SHAHZAD KHAN
Ph. D Scholar in Education
Northern University Nowshera
Cell # 0333-9018857
**Annexure - B**

**Questionnaire for Professional Support Staff**  
(E.D. Os, D.D. Os, S.D. Os, and A.D. Os)

**Topic:** The impact of multi-grade teaching on students’ performance at elementary level in Khyber Pukhtoonkhwa.

**NOTE:** This data is collected for Research purpose only. The information provided will be kept secret. The participants are requested to provide facts correctly and honestly. There are three options “Mostly”, “To some extent”, and ‘Not at all” given for each statement. The respondents have to respond one of these options “Mostly”, “To some extent”, OR “Not at all” and tick the relevant box for each statement.

Name of District:------------------------  Designation of the Official:------------------------

Age:---------------- Male/Female:------------------ Length of Service:------------------------

Educational Qualification: ---------------- Professional Qualification:---------------------

Teaching Experience: ----------------- Professional Experience:------------------------

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There are two or three classrooms Primary Schools existing in this district</td>
<td></td>
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<tr>
<td>2</td>
<td>There are Multi-grade schools existing in this district where one to three (1-3) teachers teach from prep to fifth (Prep-5th) classes</td>
<td></td>
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<tr>
<td>3</td>
<td>The teachers of these Multi-grade schools are properly trained for Multi-grade teaching</td>
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<td>4</td>
<td>Special attention is paid to Multi-grade teaching</td>
<td></td>
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<tr>
<td>5</td>
<td>These Multi-grade are schools officially entitled for Multi-grade teaching?</td>
<td></td>
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<tr>
<td>6</td>
<td>The government is providing special financial support and facilitation for Multi-grade schools</td>
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<tr>
<td>7</td>
<td>Teachers are encouraged by the government with incentives who teach in Multi-grade setting</td>
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<tr>
<td>8</td>
<td>There is a separate curriculum for Multi-grade as compared to conventional schools</td>
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<tr>
<td>9</td>
<td>The curriculum taught in Multi-grade schools is integrated</td>
<td></td>
<td></td>
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<tr>
<td>10</td>
<td>The teachers adapt Multi-grade teaching as an effective teaching approach</td>
<td></td>
<td></td>
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<tr>
<td>11</td>
<td>The teachers adapt Multi-grade teaching by necessity</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>12</td>
<td>Multi-grade schools are supervised and assessed regularly</td>
<td></td>
<td></td>
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<tr>
<td>13</td>
<td>Appropriate teaching and learning materials are provided for Multi-grade teaching</td>
<td></td>
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<tr>
<td>14</td>
<td>The teachers are using teaching and learning materials effectively in the classroom</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>15</td>
<td>Practical guidebooks are provided to teachers for Multi-grade teaching</td>
<td></td>
<td></td>
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<tr>
<td>16</td>
<td>Special workshops and Seminars are arranged to overcome the challenges of teachers in Multi-grade setting.</td>
<td></td>
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<tr>
<td>17</td>
<td>The government arranges In-service teachers training programs for the improvement Multi-grade teaching</td>
<td></td>
<td></td>
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<tr>
<td>18</td>
<td>Parents and Community cooperate with each other to encourage Multi-grade teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Students are provided opportunity for activities and independent learning</td>
<td></td>
<td></td>
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<tr>
<td>20</td>
<td>Parents and Teachers Counsel’s (PTC) activities are strictly monitored.</td>
<td></td>
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</tr>
</tbody>
</table>

SHAHZAD KHAN
Ph.D Scholar in Education
Northern University Nowshera
Cell Phone# 0333-9018857
**Observation Checklist**

**Topic:** The impact of Multi-grade teaching on students’ performance at elementary level in Khyber Pukhtoonkhwa.

**District’s Name:** ___________________  **School’s Name:** ___________________

**Total number of teachers in the School:** ------  **Total number of students in the School:** ----

**Total number of classrooms:** --------  **Combined grades:**

(i) __________________
(ii) --------
(iii) __________________

### 1: CURRICULUM

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Curriculum is up to the level of the students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The Curriculum is integrated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The Curriculum is fulfilling the needs of the society</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>The Curriculum is in psychological sequence</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td>The conventional School Curriculum is taught in Multi-grade classrooms</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6</td>
<td>Activities included in the Curriculum are practicable in the classroom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The Curriculum is updated to the needs of current world</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### 2: INSTRUCTIONAL STRATEGIES

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The teacher uses several teaching strategies in teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The teacher makes plan and preparation before teaching to Multi-grade classroom.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The teacher provides opportunity to students for personal attention</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The teacher teaches one grade while other grades work at their own</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td>The teacher teaches a theme to all grades at the same time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The students progress at their own pace</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>The teacher provides opportunity to learners for group learning and individual learning.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

### 3: INSTRUCTIONAL MATERIALS

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Appropriate teaching and learning materials are available for Multi-grade teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The teachers have practical guidebooks at their</td>
<td></td>
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</tbody>
</table>
The teachers make proper use of instructional materials

The instructional materials are relevant to current contents

### 4: CLASSROOM MANAGEMENT

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The timetable is followed strictly in Multi-grade classrooms</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>The timetable is flexible to change according to the needs of the students</td>
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<tr>
<td>3</td>
<td>The Classroom rules and procedure are developed jointly among the teachers</td>
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<tr>
<td>4</td>
<td>Students are encouraged to take responsibility for their own learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>The older students cooperate with the younger ones</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The environment is conducive for teaching and learning process</td>
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</tbody>
</table>

### 5: TEACHERS TRAINING

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The teacher is trained for Multi-grade teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The teachers like to teach in Multi-grade setting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>The teachers consider Multi-grade teaching as more effective than conventional school teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>A system is existing for the assessment of multi-grade teaching and learning process</td>
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</tr>
<tr>
<td>5</td>
<td>The behavior of the teacher is democratic toward the students</td>
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</tbody>
</table>

### 6: COMMUNITY INVOLVEMENT

<table>
<thead>
<tr>
<th>Serial No</th>
<th>Statement</th>
<th>Mostly</th>
<th>To some extent</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The community is involved in management and support of multi-grade teaching</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Parents communicate the teachers in education of their children</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Parents ask about their children progress</td>
<td></td>
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<tr>
<td>4</td>
<td>Prominent personalities visit the school to solve local problems of the school</td>
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<tr>
<td>5</td>
<td>Parents and Teachers Counsel (PTC) is working together effectively</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serial No</td>
<td>Statement</td>
<td>Mostly</td>
<td>To some extent</td>
<td>Not at all</td>
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</tr>
<tr>
<td>1</td>
<td>Drinking water is available in the school</td>
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<tr>
<td>2</td>
<td>Toilets are built for the use of the students</td>
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<tr>
<td>3</td>
<td>Electricity has been fitted in the school</td>
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<tr>
<td>4</td>
<td>Ceiling fans have been fixed in the classrooms</td>
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<tr>
<td>5</td>
<td>Desks and benches exist in the school for students</td>
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<tr>
<td>6</td>
<td>Boundary wall has been constructed around the school</td>
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<tr>
<td>7</td>
<td>Playground has been provided for the students</td>
<td></td>
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</tbody>
</table>
### LIST OF SCHOOLS

**District Nowshera**
- GOVERNMENT PRIMARY SCHOOL Behram Kali New Neher
- GOVERNMENT PRIMARY SCHOOL Dhabigatt NSR Cantt:
- GOVERNMENT PRIMARY SCHOOL Ali Abad Risalpur
- GOVERNMENT PRIMARY SCHOOL Sohbat Korona
- GOVERNMENT PRIMARY SCHOOL shpano Korona
- GOVERNMENT PRIMARY SCHOOL No- 1 Nowshera Kalan
- GOVERNMENT PRIMARY SCHOOL No-2 Samander Gari
- GOVERNMENT PRIMARY SCHOOL Hoti Khel Nowshera Kalan
- GOVERNMENT PRIMARY SCHOOL Shala Khel
- GOVERNMENT PRIMARY SCHOOL Keshtipul

**District Peshawar**
- GOVERNMENT PRIMARY SCHOOL Kandi Kala Khel
- GOVERNMENT PRIMARY SCHOOL Masma
- GOVERNMENT PRIMARY SCHOOL Kand Kalu Khel
- GOVERNMENT PRIMARY SCHOOL No-1 Kala
- GOVERNMENT PRIMARY SCHOOL No-1 Chamkani
- GOVERNMENT PRIMARY SCHOOL no-2 Chamkani
- GOVERNMENT PRIMARY SCHOOL Chughalpura
- GOVERNMENT PRIMARY SCHOOL Sardar Gari
- GOVERNMENT PRIMARY SCHOOL No-1 Jagra
- GOVERNMENT PRIMARY SCHOOL No-2 Jagra

**District D.I.Khan**
- GOVERNMENT PRIMARY SCHOOL No-1 Haroon Abad Kulachi
- GOVERNMENT PRIMARY SCHOOL No-2 Haroon Abad Kulachi
- GOVERNMENT PRIMARY SCHOOL Ranazai
- GOVERNMENT PRIMARY SCHOOL Qadam Khel
- GOVERNMENT PRIMARY SCHOOL Haidan
- GOVERNMENT PRIMARY SCHOOL Lachra
- GOVERNMENT PRIMARY SCHOOL Jalar Lashar Ali
- GOVERNMENT PRIMARY SCHOOL Bheti Abad
- GOVERNMENT PRIMARY SCHOOL Shaheed Abad
- GOVERNMENT PRIMARY SCHOOL Kamran Abad
- GOVERNMENT PRIMARY SCHOOL Chah Mapal

**District Mardan**
- GOVERNMENT PRIMARY SCHOOL Jan Baz Narai
- GOVERNMENT PRIMARY SCHOOL Zor Abad
- GOVERNMENT PRIMARY SCHOOL No-1 Manga
- GOVERNMENT PRIMARY SCHOOL Palo Dheri
- GOVERNMENT PRIMARY SCHOOL Zando Dheri
- GOVERNMENT PRIMARY SCHOOL Ghunda
- GOVERNMENT PRIMARY SCHOOL Shamandur Kali
- GOVERNMENT PRIMARY SCHOOL Hasan Kali
GOVERNMENT PRIMARY SCHOOL Ibrahim Khan Kali
GOVERNMENT PRIMARY SCHOOL Nang Abad

District Abbot Abad
GOVERNMENT PRIMARY SCHOOL Rajoya
GOVERNMENT PRIMARY SCHOOL Balolia
GOVERNMENT PRIMARY SCHOOL Dham Tor
GOVERNMENT PRIMARY SCHOOL Nawan Sher
GOVERNMENT PRIMARY SCHOOL Maira Rahmat Khan
GOVERNMENT PRIMARY SCHOOL Manroj
GOVERNMENT PRIMARY SCHOOL Gulibeen
GOVERNMENT PRIMARY SCHOOL Basali
GOVERNMENT PRIMARY SCHOOL Maira Mandroj
GOVERNMENT PRIMARY SCHOOL Kakool