

**RESEARCH PAPER****The Experiences of Teachers at Multi Grade Classrooms at Special Education Schools****¹Muhammad Usman Khalid*, ²Dr. Afaf Manzoor and ³Asifa Rashid**

1. Ph.D. Scholar, Department of Special Education, University of Education. Lahore. Punjab, Pakistan

2. Post-Doc IOE-University College London. UK

3. Ph.D. Scholar, Department of Special Education, University of Education. Lahore, Punjab, Pakistan

***Corresponding Author** muhammad.usman.khalid121@gmail.com**ABSTRACT**

This study examines the experiences of teachers in multi-grade classrooms within special schools in Punjab, Pakistan. The aim is to identify the challenges and practices by the teachers during multi grade teaching. This was a descriptive study and quantitative method was used. The research involved 230 participants as sample from special institutions in Punjab. Convenient sampling method was used to collect data. A self designed instrument was developed after intensive review of literature and validity from eminent field experts. Participants completed a survey questionnaire, and the collected data were analyzed using descriptive and inferential statistics. The findings indicate that teachers encounter significant challenges in multi-grade teaching within special schools, including managing different levels of learning, insufficient resources, lack of training, classroom management issues, instructional strategies, assessment difficulties, and curriculum concerns. The conclusions drawn suggested that addressing these challenges requires providing support, allocating resources, and improving classroom management practices. It also recommended enhancing professional development opportunities and designing a curriculum that promotes inclusivity and caters to the needs of students in multi-grade classrooms.

Keywords: Challenges, Classroom Management, Multi-Grade Classrooms, Opportunities, Professional Development, Special Schools, Teachers' Experiences**Introduction**

Multigrade teaching involves the education and training of students with varying ages, skills, and class levels in a single classroom, under the instruction of a single teacher (Engin, 2018). This technique to teaching is also known by numerous other labels like mixed year, combined class, vertical grouping, family grouping, composite class, split class, double-graded class, and unitary schools. Multi grade scenarios can range from one country to another, with variations in classroom structures and levels taught by a single teacher. (Nawab et al., 2011) mentioned the the study of Birch and Lally (1995) that provide some illustration, a single teacher frequently teaches students at various levels in the same or different classrooms in Nepal and in Malaysia, a teacher may instruct students at two or more levels in the same classroom, according to. On the other hand, in Pakistan, a single instructor may occasionally be in charge of teaching more than three levels in a single classroom. Multigrade teaching is used in a variety of contexts, such as sparsely populated locations with dispersed schools where one or two teachers must instruct pupils at several grade levels due to low enrolment (Shareefa, 2021).

According to (Saqlain & Research, 2015) teachers face a range of difficulties when working in multi-grade classrooms. Teachers in these settings frequently have a larger burden and find it more challenging to meet the requirements of a varied range of students. (Quail et al., 2014) further add that teachers struggle to handle the burden of several grade levels while lacking enough resources and to find time to deal with individual pupils, especially those who are performing at lower levels (Tiernan et al., 2020). According to

(Mulryan-Kyne, 2004) study, instructors felt they did not have enough time to spend with each grade level in each subject area, and this was the main drawback they noted.

Student with disability in the context of education often refers to the diverse range of learning styles and student demographics present in a classroom (Subban, 2006). Multi-grade settings differ from one another since each single-grade class is distinct from the others. Similar to that, this study's conception of variety takes into account both the unique characteristics of each learner and the variations in grades. The authors assert that all classes, especially multi-grade classes, possess a diverse range of students who work at various levels and exhibit different learning styles, preferences, and needs (Tiernan et al., 2017). Multi-grade classes with students who differ in age, class, academic performance, learning capacity, interests, background knowledge, socioeconomic position, disability, attendance, and several other criteria can exhibit a variety of kinds of assortment (Pridmore, 2007). In a variety of settings, including big and small classes, multi-grade and same-grade settings, rural and urban locations, and disadvantaged or privileged settings, teachers must address learner characteristics (Tredoux, 2020).

Literature Review

A single teacher teaches pupils from various grade levels at once, this is referred to as multigrade teaching. This arrangement departs from the typical paradigm in which pupils are instructed in groups according to age. Students in multigrade classrooms range in age and ability, which presents specific difficulties for teachers attempting to provide effective instruction (Ngubane, 2011).

Time management is one of the main challenges faced by multigrade teachers. Teachers may find it difficult to tailor lessons to each student's level since they must meet the educational demands of pupils in different grade levels (Mulryan-Kyne, 2004). Additionally, it might be challenging for teachers to convey materials coherently in multigrade classrooms because they can be unorganized and lack order. Teachers of many grades may also face difficulties finishing all their planned lessons within the available time (Du Plessis & Mestry, 2019). Insufficient funding, limited resources, and a lack of experienced teachers are additional challenges that multigrade teachers must overcome in order to deliver high-quality instruction (Benveniste & McEwan, 2000)

Attitudes and Belief of teachers about Multi grade teaching

Researchers have looked at teachers' perspectives of teaching and learning to obtain insight into their beliefs and behaviors in multigrade classrooms (Hyry-Beihammer & Hascher, 2015). Due to the broader range of abilities and maturity levels, many teachers claim that multigrade teaching involves more planning, preparation, and organization than single-grade teaching (Mulryan-Kyne, 2004). The lack of time for individualized attention and rehabilitation, repeated interruptions, off-task conduct, and insufficient time for oral instruction are further issues they raise. Challenges include not having enough time to teach particular courses, prepare materials, grade exams, and give comments (Zentall, 2005).

The Context & multi grade teaching in Pakistan

Teaching two or more levels in one classroom, the teacher switches between them is a common practice. (Nawab et al., 2011) quotes the Birch and Lally (1995) study which found that it is not in keeping with the spirit of multigrade instruction, which involves integrating similar or related concepts/themes across different levels. The writers distinguished between two types of integration: curriculum integration and integration of students. However, they pointed out that this can be difficult for teachers because they must be familiar with the topics of numerous subjects at various levels. Furthermore, it's possible

that the curriculum in nations with single-grade instruction models isn't set up for multigrade teaching. The integration of disciplines like science, social studies, and islamiat with urdu was attempted in Pakistan, but it was unsuccessful. The establishment of multi-grade classrooms in middle school is a significant issue that cannot be overlooked in Pakistan due to the country's climatic circumstances, economic position, and predominance of remote and nomadic rural areas. Nomads frequently migrate from villages to towns due to job-related migrations, such as farming, which reduces the number of students enrolled and increases the demand for multi-grade classrooms. The necessity for significant program development to efficiently manage these classes is highlighted by the rise in multi-grade classrooms and the number of pupils learning in them in Pakistan. Despite research demonstrating the benefits of multi-grade classrooms, there is no program in Pakistan's educational system to address the issues and challenges of multi-grade teaching. By recognizing these issues and obstacles, multi-grade classes can be improved and turned into worthwhile educational opportunities (Nawab et al., 2011).

Material and Methods

This study used survey method to collect data from teachers teaching in multi grade classrooms at special schools of Punjab utilizing a quantitative approach, descriptive in nature. These teachers made up the study's exclusive sample, and the researcher designed a questionnaire as the main tool for collecting data more about the issue under investigation. The questionnaire was divided into two sections, with the first section asking about the demographics of the teachers' names, teaching backgrounds, degrees, ages, genders, and job titles as well as the names of their schools, the number of multi-grade classes they are teaching at once, their districts, and the maximum number of disabilities they are accommodating in their classrooms. The other section was about exploring the experiences of teachers in multigrade teaching on various factors such as curriculum, instructional strategies & material, classroom management & assessment. On a Likert scale from strongly agree to strongly disagree, respondents' responses were collected on 33 items in the second section of the survey. The researcher presented to five eminent experts from various institutions' departments of special education and their opinions were noted. They provided comments, and it was decided that the instrument had legitimate content because all of the items measured the teachers' experiences in multi-grade classrooms in Punjab's special schools. Following the validation procedure, the supervisor and the experts' recommendations were addressed and integrated into the instrument.

After the instrument validation was finished, a pilot study was carried out to evaluate the instrument's dependability. A sample of 30 teachers who work in multi-grade classrooms at special schools in the Punjab cities of Lahore and Kasur were given the test as part of the pilot project. The dependability of the tool was then evaluated using the data gathered during the pilot research. For reliability of questionnaire for experience of teachers at multi grade classrooms in special schools of Punjab was checked through statistical procedure, value of Cronbach alpha turned to be (.917) which showed the instrument is highly reliable. According to (Shmueli & Cohen, 2000) the suitability of a research aspect is not solely determined by the accuracy of the procedures and tools utilized, but also by the validity of the sampling design that is adopted.

The researchers in this study used convenient sampling method to select the sample, which involves selecting subjects based on their easy accessibility and proximity to the researchers. Sample of the study includes 230 teachers from special schools of Punjab teaching in multigrade classroom to children with disabilities.

The researcher used multiple means to collect data. In-person visits to schools gather data and disseminated google form at various social media apps i.e., Facebook, Whatsapp & Instagram was shared with remote colleagues. Few of the data were collected via telephone to obtain input on multi-grade teaching. After gathering the data, the researcher

assigned a unique ID number to each participant in the sample. Subsequently, the researcher coded each item in the instrument and input the information into the SPSS software for the purpose of analyzing the data. Data was analyzed by using SPSS version 21. After coding the data into SPSS, data were computed and analyzed. The researcher computed all items of specific variables. Inferential & descriptive analysis was used to reach findings of the study.

The data was presented in tabulation form on SPSS, analyzed and interpreted. Following analysis describes demographics of the study.

Results and Discussion

Table 1
Frequency distribution of gender, qualification, Teaching Experience, Age and Designation of teachers

	<i>f</i>	%
Gender of teacher		
Female	140	60.9
Male	90	39.1
Total	230	100.0
Qualification		
M.A	106	46.1
M.Ed	42	18.3
M.Phil	74	32.2
PhD Scholar	8	3.5
Total	230	100.0
Teaching Experience		
0-5	62	27.0
6-10	100	43.5
11-15	52	22.6
16-20	16	7.0
Total	230	100.0
Age of teachers		
25-35	120	52.2
36-45	107	46.5
46-55	3	1.3
Total	230	100.0
Designation		
JSET	134	58.3
SSET	85	37.0
Speech Thearapist	7	3.0
Psychologist	4	1.7
Total	230	100.0

Table 1 indicates that out of 230 teachers of multi grade classrooms, 140(60.9%) were female teachers and 90(39.1%) were male teachers. Table 1 also shows that out of 230 teacher, 106(46.1%) were master's degree holder and 42(18.3%) were M.Ed. degree holder. 74(32.2%) were M.Phil. degree holder, 8(3.5%) were PhD Scholar degree holder. It shows that out of 230 teacher, 62(27.0%) have 0-5 years experience, 100 (43.5%) have 6-10 years experience, 52 (22.6%) have 11-15 years experience and 16(7.0%) have 16-20 years experience. It shows that out of 230 teacher, 120(52.2%) have age 25-35, 107(46.5%) have age 36-45, 03(1.3%) have age 46-55. And table 1 shows that out of 230 teacher, 134 (58.3%) were JSET, 85(37.0%) were SSET, 7(3.0%) were Speech Therapist and 4(1.7%) were Psychologist.

Table 2
Frequency distribution of Maximum No. of multi grades you are teaching

Maximum No. of multi grades you are teaching	f	%
2 grades	27	11.7
3 grades	49	21.3
4 grades	67	29.1
5 grades	58	25.2
6 grades	29	12.6
Total	230	100.0

Table 2 shows that out of 230 teachers, 27(11.7%) teachers were caters 2 grades, 49(21.3%) teachers were caters 3 grades, 67(29.1%) teachers were caters 4 grades, 58(25.2%) teachers were caters 5 grades, 29(12.6%) teachers were caters 6 grades.

Table 3
Frequency distribution of Disabilities you are teaching

Disabilities you are teaching	f	%
HIC	105	45.7
VIC	27	11.7
PD	33	14.3
IDD	65	28.3
Total	230	100.0

Table 3 shows that out of 230 teacher, 105(45.7%) teachers dealt HIC class, 27(11.7%) teachers dealt VIC class, 33(14.3%) teachers dealt PD class and 65(28.3%) teachers dealt IDD class.

Table 4
Frequency distribution of District of Punjab

District	f	%
Attock	2	.9
Bahawalnagar	2	.9
Bahawalpur	7	3.0
Bhakkar	6	2.6
Chakwal	1	.4
Faisalabad	27	11.7
Gujranawala	21	9.1
Jhang	2	.9
Jhehlum	11	4.8
Kasur	30	13.0
Lahore	23	10.0
Lodhran	18	7.8
Mandibahauddin	2	.9
Multan	5	2.2
Muzaffargarh	2	.9
Nankana sahib	3	1.3
Narowal	1	.4
Okara	3	1.3
RajanPur	2	.9
Rawalpindi	5	2.2
Sahiwal	16	7.0
Sargodha	6	2.6
Sheikhupura	9	3.9

Sialkot	10	4.3
Toba teksingh	12	5.2
Vehari	4	1.7
Total	230	100.0

Table 4 indicates that out of 230 teachers 2(0.9%) teachers were from Attock, 2(0.9%) teachers were from Bahawalnagar, 7(3.0%) teachers were from Bahawalpur, 6(2.6%) teachers were from Bhakhar, 1(0.4%) teachers were from Chakwal, 27(11.7%) teachers were from Faisalabad, 21(9.1%) teachers were from Gujranawala, 2(0.9%) teachers were from Jhang, 11(4.8%) teachers were from Jhehlum, 30(13.0%) teachers were from kasur, 23(10.0%) teachers were from Lahore, 18(7.8%) teachers were from Lohdran, 2(0.9%) teachers were from Mandibahodin 5(2.2%) teachers were from Multan, 2(0.9%) teachers were from Muzafargarh, 1(0.4%) teachers were from Nankansahb, 3(1.3%) teachers were from Narowal, 3(1.3%) teachers were from Okara, 2(0.9%) teachers were from Rajanpur, 5(2.2%) teachers were from Rawalpindi 16(7.2%) teachers were from Sahiwal, 6(2.6%) teachers were from Sargoda, 9(3.9%) teachers were from Sheikupura, 10(4.3%) teachers were from Sialkot, 12(5.2%) teachers were from Toba Tek Singh and 4(1.7%) teachers were from Vehari

Descriptive Statistics

Table 5
The challenge(Curriculum) of multi grade teaching to teach the children with disabilities in special schools in Punjab

Curriculum	Minimum	Maximum	Mean	SD
Adapting the curriculum relevant for all students in the class is challenging.	1.0	5.0	4.42	0.73
Addressing varying levels of prior knowledge among students from different grades is difficult.	1.0	5.0	4.17	0.86
Differentiating instruction for students with diverse abilities is difficult.	2.0	5.0	4.35	0.71
Necessary resources are not always available to effectively implement curriculum in a multi-grade class.	2.0	5.0	4.47	0.68
Support from the school to address the challenges of curriculum for multi-grade teaching is inadequate.	1.0	5.0	4.15	0.94
Multiple lessons are planned for a subject to teach a multi-grade class.	1.0	5.0	4.33	0.83
Average Mean			4.31	0.79

The average mean score of 4.31 suggests that the curriculum is highly challenging for teachers in multi-grade classrooms. The standard deviation of 0.79 indicates some variability in the responses, suggesting that some teachers find the curriculum more challenging than others.

Table 6
The challenge(Instructional Strategies) of multi grade teaching to teach the children with disabilities in special schools in Punjab

Instructional Strategies	Min	Max	Mean	Std. Deviation
Selecting appropriate instructional strategies for different grade levels can be challenging.	1.0	5.0	4.36	0.77

Instructional strategies effectively meet the needs of all students in the multi grade classroom.	1.0	5.0	4.28	0.92
Instructional strategies are according to diverse perspectives.	1.0	5.0	3.98	0.87
Instructional strategies are according to cultural context.	1.0	5.0	4.30	0.81
Necessary resources for effective implementation of instructional strategies for multi-grade teaching are accessible.	1.0	5.0	4.35	0.85
Aware new research and best practices for instructional strategies in multi-grade teaching.	1.0	5.0	4.65	0.75
Average Mean			4.31	0.83

The average mean score of 4.31 suggests that instructional strategies is highly challenging. The standard deviation of 0.83 indicates some variability in the responses, suggesting that mostly teachers find the instructional strategies highly challenging than others.

Table 7
The challenge (Instructional Material) of multi grade teaching to teach the children with disabilities in special schools in Punjab

Instructional Material	Min	Max	Mean	Std. Deviation
Developing instructional material for multi-grade teaching is a challenging task for teachers.	1.0	5.0	4.41	0.71
Teachers need to have a good understanding of the curriculum of all grade levels they teach to create effective instructional material.	1.0	5.0	4.32	0.84
Teachers face difficulties in finding appropriate instructional material for multi-grade teaching.	1.0	5.0	4.33	0.63
Teachers need to be creative when creating instructional material for multi-grade teaching.	1.0	5.0	4.34	0.71
Technology can help teachers overcome challenges in creating instructional material for multi-grade teaching.	1.0	5.0	4.45	0.63
Access to professional development opportunities can help teachers improve their instructional material for multi-grade teaching.	1.0	5.0	4.47	0.63
Average Mean			4.38	0.69

The average mean score of 4.38 suggests that instructional material is highly challenging. The standard deviation of 0.69 indicates some variability in the responses, suggesting that mostly teachers find the instructional material is highly challenging than others.

Table 8
The challenge(Classroom Management) of multi grade teaching to teach the children with disabilities in special schools in Punjab

Classroom Management	Min	Max	Mean	Std. Deviation
Multi grade classrooms are challenging for teachers to manage	1.0	5.0	4.17	0.92
Multi grade classrooms require different management strategies compared to single-grade classrooms	1.0	5.0	4.23	0.69
Maintaining student engagement is challenge in a multi grade classroom	1.0	5.0	4.12	0.91
Providing adequate feedback for students of different grade levels is challenging in a multi grade classroom	1.0	5.0	4.00	0.80
Managing classroom discipline is challenging in a multi grade classroom	1.0	5.0	4.14	0.89
It is challenging for teachers to plan and prepare lessons that are appropriate for students of different grade levels in a multi grade classroom	1.0	5.0	4.11	0.81
Training is important for teachers in managing a multi grade classroom	1.0	5.0	4.45	0.63
Average Mean			4.18	0.81

The average mean score of 4.18 suggests that teacher's classroom management is highly challenging. The standard deviation of 0.81 indicates some variability in the responses, suggesting that mostly teachers find the teacher's classroom management is highly challenging than others

Table 9
The challenge(Teachers Training) of multi grade teaching to teach the children with disabilities in special schools in Punjab

Teachers Training	Minimum	Maximum	Mean	Std. Deviation
teachers who receive training in multi grade teaching have better skills to manage a multi grade classroom	1.0	5.0	4.45	0.70
schools should offer ongoing professional development for teachers in multi grade classrooms	1.0	5.0	4.37	0.72
teachers who are not trained in multi grade teaching effectively handle a multi grade classroom.	1.0	5.0	4.29	0.77
teachers who lack training in multi grade teaching face difficulties in preparing lessons for a multi-grade classroom	1.0	5.0	4.46	0.66
Average Mean			4.39	0.71

The average mean score of 4.39 suggests that teachers training are highly recommended by teachers in multi-grade classrooms. The standard deviation of 0.71 indicates some variability in the responses, suggesting that mostly teachers find the teachers training are necessary than others.

Table 10
The challenge(Classroom assessment strategies) of multi grade teaching to teach the children with disabilities in special schools in Punjab

Classroom assessment strategies	Minimum	Maximum	Mean	Std. Deviation
Develop assessment strategies that effectively evaluate the learning of students in a multi grade classroom is challenging.	2.0	5.0	4.33	0.56
Different types of assessment strategies that can be used in a multi grade classroom.	1.0	5.0	4.25	0.69
Ongoing professional development related to assessment strategies for multi grade classrooms is beneficial for teachers.	2.0	5.0	4.27	0.68
classroom assessment strategies is adapted according to multi grade classroom	2.0	5.0	4.29	0.63
Average Mean			4.28	0.64

The average mean score of 4.28 suggests that the classroom assessment strategies to implement is highly challenging for teachers in multi-grade classrooms. The standard deviation of 0.64 indicates some variability in the responses, suggesting that mostly teachers find the classroom strategies are more challenging to implement than others.

Table 11
Comparison of challenges faced by female and male teacher about curriculum in multigrade classroom of special school

Sr. No	Test Variables	Respondent	N	Mean	t	sig
1	Curriculum	female	140	4.35	1.86	0.06
2		male	90	4.26		

The Independent sample t-test above table depicts there is no statistical significant gap between the challenges faced by female and male teachers in curriculum ($t = 1.86$, $Sig = 0.06$ $Mean_{female} = 4.35$, $Mean_{male} = 4.26$). So conclusion is that both female male teachers face the challenges in curriculum

Table 12
Comparison of challenges faced by female and male teacher about instructional strategies in multi grade classroom of special school

Sr. No	Test Variables	Respondent	N	Mean	T	sig
1	Instructional Strategies	Female	140	4.34	1.20	0.22
2		Male	90	4.27		

The Independent sample t-test above table depicts there is no statistical significant gap between the challenges faced by female and male teachers in instructional strategies ($t = 1.20$, $Sig = 0.22$ $Mean_{female} = 4.34$, $Mean_{male} = 4.27$). So conclusion is that both female and male teachers face the challenges in instructional strategies.

Table 13
Comparison of challenges faced by female and male teacher about instructional material in multigrade classroom of special school

<i>Sr. No</i>	<i>Test Variables</i>	<i>Respondent</i>	<i>N</i>	<i>Mean</i>	<i>T</i>	<i>sig</i>
1	Instructional Material	Female	140	4.41	1.35	0.17
2		Male	90	4.35		

The Independent sample t-test above table depicts there is no statistical significant gap between the challenges faced by female and male teachers in instructional material ($t = 1.35$, $Sig = 0.17$ $Mean_{female} = 4.41$, $Mean_{male} = 4.35$). So conclusion is that both female and male teachers face the challenges in instructional material.

Table 14
Comparison of challenges faced by female and male teacher about classroom management in multigrade classroom of special school

<i>Sr. No</i>	<i>Test Variables</i>	<i>Respondent</i>	<i>N</i>	<i>Mean</i>	<i>T</i>	<i>sig</i>
1	Classroom Management	female	140	4.14	-1.43	0.15
2		male	90	4.24		

The Independent sample t-test above table depicts there is no statistical significant gap between the challenges faced by female and male teachers in classroom management ($t = -1.43$, $Sig = 0.15$ $Mean_{female} = 4.14$, $Mean_{male} = 4.24$). So conclusion is that both female male teachers face the challenges in classroom management.

Table 15
Comparison of challenges faced by female and male teacher about teachers training in multigrade classroom of special school

<i>Sr. No</i>	<i>Test Variables</i>	<i>Respondent</i>	<i>N</i>	<i>Mean</i>	<i>T</i>	<i>sig</i>
1	Teachers Training	female	140	4.41	0.82	0.41
2		male	90	4.36		

The Independent sample t-test above table depicts there is no statistical significant gap between female and male teachers for necessity of teachers training ($t = 0.82$, $Sig = .41$ $Mean_{female} = 4.41$, $Mean_{male} = 4.36$). So conclusion is that both female male teachers recommend that teachers training are highly required to cope the challenges of multi grade teaching in special school.

Table 16
Comparison of challenges faced by female and male teacher about classroom assessment strategies in multigrade classroom of special school

<i>Sr. No</i>	<i>Test Variables</i>	<i>Respondent</i>	<i>N</i>	<i>Mean</i>	<i>T</i>	<i>sig</i>
1	Classroom Assessment Strategies	female	140	4.31	1.46	0.14
2		male	90	4.24		

The Independent sample t-test above table depicts there is no statistical significant gap between the challenges faced by female and male teachers in classroom assessment strategies ($t = 1.46$, $Sig = 0.14$ $Mean_{female} = 4.31$, $Mean_{male} = 4.24$). So conclusion is that both female and male teachers face the challenges in classroom assessment strategies.

Table 17
Compare mean score of variables (curriculum, instructional strategies, instructional material, classroom management, teachers training and classroom assessment strategies) and teaching experiences

		Sum of Squares	df	Mean Square	F	Sig.
Curriculum	Between Groups	.718	3	.239	1.795	.149
	Within Groups	30.123	226	.133		
	Total	30.841	229			
Instructional Strategies	Between Groups	.477	3	.159	1.015	.387
	Within Groups	35.419	226	.157		
	Total	35.896	229			
Instructional Material	Between Groups	.525	3	.175	1.548	.203
	Within Groups	25.536	226	.113		
	Total	26.060	229			
Classroom Management	Between Groups	.600	3	.200	.738	.530
	Within Groups	61.244	226	.271		
	Total	61.844	229			
Teachers Training	Between Groups	2.758	3	.919	4.936	.002
	Within Groups	42.102	226	.186		
	Total	44.860	229			
Class Assessment Strategies	Between Groups	.244	3	.081	.668	.572
	Within Groups	27.529	226	.122		
	Total	27.773	229			

Statistically above ANOVA table shows that there is no significant difference between teaching experience and the mean values of different challenging variables faced by teachers i.e. mean score of curriculum (df = 3, F = 1.795, Sig. = .149), mean score of instructional strategies (df = 3, F = 1.015, Sig. = .387), mean score of instructional material (df = 3, F = 1.548, Sig. = .203), mean score of classroom management (df = 3, F = 0.738, Sig. = .530), mean score of classroom assessment strategies (df = 3, F = 0.688, Sig. = .572) but mean value of teachers training and teaching experience (df = 3, F = 4.936, Sig. = .002) shows significant difference so LSD Post hoc multiple comparison table shows that there is significant difference between the mean values of following groups which statistically showed that teachers have require training development program at any level of experiences.

Table 18
Multiple Comparisons of dependent variable with teachers training

Multiple Comparisons				
LSD				
Dependent Variable			Mean Difference	Sig.
	0-5	6-10	.13323	.057

Teachers Training	6-10	11-15	.30707*	.000
		16-20	.05948	.624
		0-5	-.13323	.057
	11-15	11-15	.17385*	.019
		16-20	-.07375	.526
		0-5	-.30707*	.000
	16-20	6-10	-.17385*	.019
		16-20	-.24760*	.046
		0-5	-.05948	.624
		6-10	.07375	.526
		11-15	.24760*	.046

*. The mean difference is significant at the 0.05 level.

The result indicates that the above challenging areas that is faced by teachers in multigrade classroom is exist at any level of experience which affect the teaching learning process and it also shows that teachers training is necessary for teachers to enhance the learning process and overcome the above mentioned barriers in multi grade classroom.

Table 19
Compare mean score of variables (curriculum, instructional strategies, instructional material, classroom management, teachers training and classroom assessment strategies) and Qualification.

		Sum of Squares	df	Mean Square	F	Sig.
Curriculum	Between Groups	.982	3	.327	2.478	.062
	Within Groups	29.859	226	.132		
	Total	30.841	229			
Instructional Strategies	Between Groups	.306	3	.102	.647	.586
	Within Groups	35.591	226	.157		
	Total	35.896	229			
Instructional Material	Between Groups	.241	3	.080	.703	.551
	Within Groups	25.820	226	.114		
	Total	26.060	229			
Classroom Management	Between Groups	.338	3	.113	.414	.743
	Within Groups	61.506	226	.272		
	Total	61.844	229			
Teachers Training	Between Groups	.762	3	.254	1.302	.274
	Within Groups	44.098	226	.195		
	Total	44.860	229			
Class Assessment Strategies	Between Groups	.034	3	.011	.092	.964
	Within Groups	27.739	226	.123		
	Total	27.773	229			

Table shows that a statistical insignificant difference was found among the Qualification of teachers and six challenging areas faced by teachers in multigrade teaching i.e. Curriculum (df = 3, F = 2.478, Sig. = .062), Instructional Strategies (df = 3, F = 0.647, Sig. = .586), Instructional Material (df = 3, F = .703, Sig. = .551), Classroom Management (df = 3, F = .414, Sig. = .743), Teachers Training (df = 3, F = 1.302, Sig. = .274) and Class Assessment Strategies (df = 3, F = .092, Sig. = .964). Hence it can be concluded that on all six barriers faced by teachers are affect the teaching learning process irrespective their qualification.

Table 20
Compare mean score of variables (curriculum, instructional strategies instructional material, classroom management, teachers training and classroom assessment strategies) and Disabilities you are teaching

		Sum of Squares	df	Mean Square	F	Sig.
Curriculum	Between Groups	.763	3	.254	1.912	.128
	Within Groups	30.077	226	.133		
	Total	30.841	229			
Instructional Strategies	Between Groups	.614	3	.205	1.312	.271
	Within Groups	35.282	226	.156		
	Total	35.896	229			
Instructional Material	Between Groups	.027	3	.009	.079	.971
	Within Groups	26.033	226	.115		
	Total	26.060	229			
Classroom Management	Between Groups	1.299	3	.433	1.616	.186
	Within Groups	60.545	226	.268		
	Total	61.844	229			
Teachers Training	Between Groups	1.999	3	.666	3.514	.016
	Within Groups	42.861	226	.190		
	Total	44.860	229			
Class Assessment Strategies	Between Groups	.669	3	.223	1.859	.137
	Within Groups	27.104	226	.120		
	Total	27.773	229			

Statistically above ANOVA table shows that there is no significant difference between Disabilities you are teaching and the mean values of different challenging variables faced by teachers i.e. mean score of curriculum (df = 3, F = 1.912, Sig. = .128), mean score of instructional strategies (df = 3, F = 1.312, Sig. = .271), mean score of instructional material (df = 3, F = 0.079, Sig. = .971), mean score of classroom management (df = 3, F = 1.616, Sig. = .186), mean score of classroom assessment strategies (df = 3, F = 1.859, Sig. = .137) but mean value of teachers training and Disabilities you are teaching (df = 3, F = 3.514, Sig. = .016) shows significant difference so LSD Post hoc multiple comparison table shows that there is significant difference between the mean values of following groups which showed that teacher training development program is necessary whatever what type of class taught by teacher

Table 21
Multiple Comparisons of dependent variable with teachers training
Multiple Comparisons

LSD			Mean Difference	Sig.
Dependent Variable				
HIC	VIC		.23598*	.013
	PD		-.12597	.149
	IDD		.01960	.776
VIC	HIC		-.23598*	.013
	PD		-.36195*	.002
	IDD		-.21638*	.031
PD	HIC		.12597	.149

Teachers Training	VIC	.36195*	.002	
	IDD	.14557	.119	
	HIC	-.01960	.776	
	IDD	VIC	.21638*	.031
	PD	-.14557	.119	

***. The mean difference is significant at the 0.05 level.**

The result indicates that the above challenging areas that is faced by teachers in multigrade classroom is exist whether teacher taught any Disabilities which affect the teaching learning process and it also shows that teachers training is necessary for teachers to enhance the learning process and overcome the above mentioned barriers in multi grade classroom.

Conclusion

Results of this study indicated that multi-grade teaching is widely prevailed in theremote areas of the province of Punjab (Pakistan). Primary curriculum documents and their related list of minimum learningcompetencies have been designed specifically for single-graded classrooms, but they areregularly and frequently used for multi-grade classes. Analysis of this study also show thatprescribed curriculum for mono-grade classroom is taught in multi-grade situation. (Sampson, 2015) elaborates that the conceptual skills required for the prescribed curriculum are too greater for theteacher to cope with, which create problems and concerns for teachers in multi-grade classroom (KHAN, 2016) also has the same sentiments, saying that teachers in multi-grade situation face aconsiderable barrier in managing instruction of different grades, they need to know much moreabout the content of primary education for more than one grades and in every subject area.

Instructional strategies are a set of regular measures adopted by a teacher for directing the activities in order toachieve instructional objectives according to conditions and facilities. Teachers have used various methods, which have always been changed and evolved givenavailable facilities and the emergence of new ideas (Mortazavizadeh et al., 2017). Teaching method determinesteacher's duties and paves the ground for the activities of the students in the classroom, and its success dependson the quantity and quality of the students' learning. In a teaching process, behavioral science specialists have divided teaching methods into different codes such as old and new, active and passive, interactive andnon-interactive, far and near, direct and indirect, and teacher-centered and learner-centered methods but for a single teacher it is challenging to implement the strategies to enhance the learning process. If teaching methods are effective and efficient, they will lead to desirable objectives (Mortazavizadeh et al., 2017).Teaching methods in multi-grade classes depend on teacher's capability, subject, lesson's objectives and classposition so that in the study entitled "Investigating teaching methods in multi-grade classes in Austria andFinland", (Hyry-Beihammer&Hascher, 2015) postulated that teaching methods were widely different in multi-gradeclasses and were related to the teacher's personality, teaching subjects and situations. Hence, it is not possible toidentify the most common method and more difficult to decide which strategies are more effective.

The scarcity of instructional materials isanother matter of concerned.The finding of this study has shown that appropriate teaching and learning materials werenot available in multi-grade schools. (Taole&tribals, 2014) mentioned Coetzee et al (2008) pointed out that the provision of appropriate teaching materials is a key aspect in managing in multi-grade classes. Teaching andlearning aids are an integral part of successful instruction in any teaching context. Instructionalmaterials are often the lens through which students view the learning area and the lesson. Teachers in multi-grade settings need to be provided with appropriate,relevant and updated instructional materials, if effective instruction is to be attained.

The results of this study indicate that the teachers in multi-grade classes were mostly unable to manage the classes effectively. (Machemedze&Chinamasa, 2015) is of the view that management is an essential task of the classroom teacher and this function of teacher is more important in multigrade context. (Taole&tribals, 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. (Tredoux, 2020) 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.(KHAN, 2016) 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.

As for as 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.(KHAN, 2016) quotes the 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 creates problems if not implemented properly. (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 readdressed in the account of teachers training. (Buaraphan et al., 2018) are of the opinion that pre-service and in-service teachers training are vital for multi-grade setting. (Taole&tribals, 2014) also emphasis that for effective multi-grade teaching, the teacher must be better trained. (Tredoux, 2020) 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. (Taole et al., 2012) are of the view that teacher education programs cannot continue a dominant focus on mono-grade teaching while multi-grade teaching is practiced in schools.

Velasco et al., (2022) pointed out that assessment is very important for effective instruction because it is a process of determining what the students know, what they are capable of doing and what they are interested in. In the case of multi-grade teachers, they make sure that they assess their learners using variety of assessment. Accordingly, they make use of variety of assessments to make learning more interesting.(Erden& Instruction, 2020) who revealed that a multi-grade teacher needs to design or produce assessment strategies to meet the individual requirements of the students because each student has got different backgrounds, learning styles and needs that teachers should be aware and how to assess the progress of students. Notably, assessment should be varied to determine if set objectives or goals are met. In fact, the assessment techniques used by the teachers, the frequency of the assessment activities, the feedback given to the students, and the presentation of the assessment results constitute an assessment environment for every classroom (Buldur et al., 2014).

The study examined the challenges faced by male and female teachers in multi-grade classrooms in special schools. The results showed that the curriculum, instructional strategies, instructional materials, classroom management, classroom assessment strategies, and teacher training were all identified as highly challenging by the teachers. The analysis showed that both male and female teachers faced similar challenges across these areas, and there were no significant differences in the challenges faced by each gender.

The study suggests that the challenges faced by teachers in multi-grade classrooms in special schools require significant attention and support. The findings highlight the need for targeted teacher training and professional development programs to address these challenges. Such programs could help to improve teacher effectiveness and increase student learning outcomes in multi-grade classrooms in special schools.

Overall, the study emphasizes the importance of understanding the challenges faced by teachers in special schools and the need for targeted interventions to support these teachers in their critical work. By addressing the challenges identified in this study, educational authorities can help to ensure that all students in special schools receive equitable access to high-quality education.

Recommendations:

The following recommendations were made according to above question:

- Provide regular and effective training opportunities for teachers in multi-grade classrooms to help them cope with the challenges of teaching a diverse group of students with varying abilities.
- Develop and implement a comprehensive curriculum that is tailored to the specific needs of students in multi-grade classrooms, with a focus on providing a challenging yet achievable learning experience.
- Provide teachers with adequate instructional material and resources to facilitate effective teaching in multi-grade classrooms, including teaching aids and tools that cater to students with diverse learning needs.
- Promote effective classroom management practices that enable teachers to create a positive learning environment for all students in multi-grade classrooms, including clear rules and routines, effective communication, and positive reinforcement.

Reference

- Benveniste, L. A., & McEwan, P. J. (2000). Constraints to implementing educational innovations: The case of multigrade schools. *International review of education*, 46, 31-48..
- Buaraphan, K., Inrit, B., & Kochasila, W. (2018). Current policy and practice concerning multigrade teaching in Thailand. *Kasetsart Journal of Social Sciences*, 39(3), 496-501.
- Buldur, S., & Doğan, A. (2014). Adaptation of the Students' Perceptions of the Science and Technology Course Classroom Assessment Environment Scale into Turkish. *Education & Science/EgitimveBilim*, 39(176).
- Du Plessis, P., & Mestry, R. (2019). Teachers for rural schools—a challenge for South Africa. *South African Journal of Education*, 39.
- Engin, G. (2018). The Opinions of the Multigrade Classroom Teachers on Multigrade Class Teaching Practices (Multiple Case Analysis: Netherlands-Turkey Example). *International Journal of Progressive Education*, 14(1), 177-200.
- Erden, H. (2020). Teaching and Learning in Multi-graded Classrooms: Is it Sustainable?. *International Journal of Curriculum and Instruction*, 12, 359-378.
- Hyry-Beihammer, E. K., & Hascher, T. (2015). Multi-grade teaching practices in Austrian and Finnish primary schools. *International Journal of Educational Research*, 74, 104-113.
- Khan, s. (2016). *The impact of multi-grade teaching on students' performance at elementary level in khyberpukhtunkhwa* (doctoral dissertation, northern university, nowshera).
- Little, A. W. (2001). Multigrade teaching: towards an international research and policy agenda. *International Journal of Educational Development*, 21(6), 481-497.
- Machemedze, N., & Chinamasa, E. (2015). Primary school composite class teaching and learning mode: views of some stakeholders.
- Mortazavizadeh, S. H., Nili, M. R., Isfahani, A. R. N., & Hassani, M. (2017). Teachers' Lived Experiences about Teaching-Learning Process in Multi-Grade Classes. *Journal of Education and Learning*, 6(4), 354-363.
- Mulryan-Kyne, C. (2004). Teaching and learning in multigrade classrooms: What teachers say. *The Irish Journal of Education/Iris Eireannach an Oideachais*, 5-19.
- Nawab, A., & Baig, S. R. (2011). The possibilities and challenges of multigrade teaching in rural Pakistan. *International Journal of Business and Social Science*, 2(15), 166.
- Ngubane, T. I. (2011). *Teachers teaching multi-grade classes in a rural setting* (Doctoral dissertation).
- Pridmore, P. (2007). Adapting the primary-school curriculum for multigrade classes in developing countries: a five-step plan and an agenda for change. *Journal of curriculum studies*, 39(5), 559-576.

- Quail, A., & Smyth, E. (2014). Multigrade teaching and age composition of the class: The influence on academic and social outcomes among students. *Teaching and Teacher Education, 43*, 80-90.
- Sampson, C. A. (2015). *Reading practices in two urban multi-grade foundation phase classes* (Doctoral dissertation, Cape Peninsula University of Technology).
- Saqlain, N. (2015). A comprehensive look at multi-age education. *Journal of Educational and Social Research, 5*(2), 285.
- Shareefa, M. (2021). Using differentiated instruction in multigrade classes: A case of a small school. *Asia Pacific Journal of Education, 41*(1), 167-181.
- Shmueli, G., & Cohen, A. (2000). Run-related probability functions applied to sampling inspection. *Technometrics, 42*(2), 188-202.
- Subban, P. (2006). Differentiated instruction: A research basis. *International education journal, 7*(7), 935-947.
- Taole, M., & Mncube, V. S. (2012). Multi-grade teaching and quality of education in South African rural schools: Educators' experiences. *Studies of Tribes and Tribals, 10*(2), 151-162.
- Taole, M. J. (2014). Multi-grade teaching: A daunting challenge for rural teachers. *Studies of tribes and tribals, 12*(1), 95-102.
- Tiernan, B., Casserly, A. M., & Maguire, G. (2017). Meeting the Needs of Children with Special Educational Needs in Multi-Grade Classrooms. *Armagh: SCoTENS*.
- Tiernan, B., Casserly, A. M., & Maguire, G. (2020). Towards inclusive education: instructional practices to meet the needs of pupils with special educational needs in multi-grade settings. *International Journal of Inclusive Education, 24*(7), 787-807.
- Tredoux, M. (2020). *Managing multi-grade teaching for optimal learning in Gauteng West primary schools* (Doctoral dissertation).
- Velasco, R. A., Ramos, A. O., & Azarias, R. A. (2022). BADANGAM: An Indigenized Multi-Grade Teaching Model. *International Journal of Research Studies in Education, 11*, 27-42.
- Zentall, S. S. (2005). Theory-and evidence-based strategies for children with attentional problems. *Psychology in the Schools, 42*(8), 821-836.