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# LIST OF ABBREVIATIONS

ASDEO Assistant Sub Divisional Education Officer

BP Best Practices

B-TAG Bridging Technical Assistance for Governments

CPD Continuous Professional Development

DCTE Directorate of Curriculum and Teacher Education

DE&SE Directorate of Elementary and Secondary Education

DPD Directorate of Professional Development

FCDO Foreign, Commonwealth & Development Office

FGD Focus Group Discussion

FLN Foundational Literacy and Numeracy

GOAL Girls and Out of School Children - Action for Learning

GPES Government Primary Elementary School

HT Head Teacher

ISAPS Institute of Social and Policy Sciences

KESP Khyber Pakhtunkhwa Education Sector Programme

KII Key Informant Interview

KP Khyber Pakhtunkhwa

MGT Multigrade Teaching

RPDC Regional Professional Development Centre

PST Primary School Teacher

SL School Leader

SLO Student Learning Outcome

SNC Single National Curriculum





Multigrade teaching (MGT) is widely practiced in public primary schools of Khyber Pakhtunkhwa (KP). The province has a shortage of approximately 57,000 teachers. Due to this, more than 75% of the public primary schools resort to multigrade teaching where a single teacher teaches multiple grades at a time<sup>1</sup>.

This report offers a comprehensive situation analysis of multigrade teaching in the provice identifying the gaps, providing recommendations for improvement and suggesting a way forward to improve the overall effectiveness of multigrade teaching in KP.

The findings of the report have been informed by the KP MGT strategy, consultations with the Directorate of Professional Development (DPD) and Directorate of Curriculum and Teacher Education (DCTE), Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with key stakeholders and classroom observations, and are summarised below:

## **→** KP MGT Strategy

Khyber Pakhtunkhwa Education Sector Programme (KESP) Technical Assistance (TA) team in consultation with the Directorate of Elementary and Secondary Education (DE&SE) developed a Multigrade teaching strategy in 2021 to support Elementary and Secondary Education Department (E&SED) in its efforts to improve multigrade teaching practices. The strategy describes best practices in MGT for the E&SED,

schools, teachers and other relevant officials to implement and adopt to improve teaching quality and learning outcomes in schools. These best practices relate to optimal class size, combining adjacent grades, using a common timetable and providing teachers with training and support material. It also specifies actions to be performed by the DE&SE, Headteachers (HTs), DPD, DCTE and KP Education Monitoring Authority (EMA). The strategy is yet to be notified by the E&SED.

### Current Practices in MGT

Our analysis highlights following practices currently being implemented in schools in KP.

#### 1. Grades Combination

In some schools with multigrade classes, the teachers combine grades randomly (e.g., Prep with grade 5 in one classroom and Grades 2 & 3 in the other classroom), which results in difficulties in lesson planning and differentiation of instruction by the teachers as well as frustration and disengagement in students.

### 2. Classroom Management

The classroom management was seen as a recurrent issue with teachers reporting multiple challenges including segregation of students, loss of student-teacher contact time, space constraints and a general lack of clarity resulting in the teacher teaching different subjects to two groups in a multigrade setting and causing increased confusion within the classroom.

<sup>&</sup>lt;sup>1</sup> Multigrade Teaching and Learning Strategy 2021 - Punjab

<sup>&</sup>lt;sup>2</sup> Asian Development Bank (2019) School Education in Pakistan, A Sector Assessment.

#### 3. Curriculum Coverage

Teachers reported continued difficulty in managing workloads resulting in poor coverage of the syllabus.

#### 4. Lack of Resources for Teachers

DCTE initiated a pilot programme in January 2024 to enhance FLN teaching in multigrade settings for grades 1-3. However, beyond this initiative, teachers face challenges due to the absence of necessary resources for successful implementation of multigrade teaching. The lesson plans provided by the DPD are tailored for monograde classrooms, and participants in KIIs and FGDs reported the absence of a support package specific to MGT, making it difficult for teachers to effectively teach in multigrade classrooms.

## 5. Teachers' continuous professional development (CPD) opportunities

The CPD content for teachers in multigrade settings is the same as that for teachers in monograde settings. Consequently, teachers are being trained for something entirely different from what they practice. Additionally, School Leaders (SLs) or Head Teachers (HTs) lack the necessary skillset to provide support and mentorship on MGT.

#### 6. Professional Network

There is also a lack of peer learning opportunities through networking. Teachers teaching in a multigrade setting do not connect, share, and interact with their peers in similar setting. The respondents recommended that peer collaboration will be beneficial as teachers will get an opportunity to share their challenges, learn from each other and improve their teaching practices.

#### Recommendations

Based on these findings, a set of recommendations has been provided in the report. The salient features of these recommendations are:

- The Multigrade Teaching and Learning Strategy 2021 should be officially adopted to ensure continuous and sustainable MGT interventions.
- A curriculum mapping exercise should be done to identify relevant grade wise SLOs that can be grouped together.
- Teacher should be trained on MGT strategies and supported to develop material specific to MGT, including lessons plans, worksheets and academic calendars. DCTE's intervention on enhancing the teaching of FLN in multigrade settings should be evaluated after the completion of pilot and the findings should be used to improve the final design.
- The SLs and HTs should receive training to provide support to teachers specifically in MGT

schools.

- MGT training should be integrated into teacher education programmes
- Peer-learning and networking should be structured and made mandatory to provide teachers with a platform to assess, discuss and improve their teaching techniques in a classroom and develop professionally.





SECTION

1

Introduction





# Introduction

# **Project Background & Rationale of the Study**

**B**ridging Technical Assistance for governments (BTAG), a project managed by the Institute of Social and Policy Sciences (ISAPS) with financial support from the Foreign, Commonwealth Development Office (FCDO), aims to address challenges and opportunities in the education sector of Punjab and Khyber Pakhtunkhwa (KP). B-TAG's scope of work includes initiatives to facilitate learning through quality resources. For that purpose, BTAG is conducting a situation analysis of MGT in KP, identifying issues and challenges and suggesting a way forward. MGT remains prevelant in KP, and will require customised pedagogical strategies, bespoke teaching-learning materials (TLM), and required resource allocation, to achieve equitable learning

outcomes. This report will help the reader to understand the unique challenges associated with multigrade classrooms in the province. The study aims to identify the existing strengths and weaknesses of multigrade education in KP, covering aspects such as teacher preparedness, curriculum alignment, and student engagement. The findings of the report seek to contribute to improve the educational quality and inclusivity in multigrade classrooms, providing a foundation for evidence-based recommendations and a strategic way forward, fostering the development of targeted interventions, ultimately bringing sustainable improvements in the education sector in KP.

## Multigrade Teaching in Punjab

Multigrade teaching refers to a teaching practice where a single teacher takes the responsibility of teaching two or more grades together in a classroom, within a timetabled period. This practice sits in stark contrast to monograde system of education where one teacher is assigned one grade. The multigrade teaching approach is commonly employed in areas of low population density, widely scattered schools or in schools with limited resources, low enrollment and an inadequate number of teachers.

In the KP province, MGT is widely practiced,

especially in primary schools. It is established that more than 75% of schools provide instruction through multigrade teaching systems<sup>2</sup>. A study done by the KESP TA team in 2020 revealed that approximately 57,421 more teachers are required to entirely eliminate MGT from primary schools, which may not be feasible financially for the KP government.

MGT poses many challenges for teachers such as handling of different grades simultaneously in one classroom, preparation of teaching materials for all classes, inability to provide individual attention, managing students with varying needs

<sup>&</sup>lt;sup>2</sup> Multigrading Teaching Policy Khyber Pakhtunkhwa, December 2021

at the same time, implementing activity based learning strategies and their supervision, identifying individual problems of students and providing sufficient time for assessment of all students, among others<sup>3</sup>. An analysis of primary schools conducted in 2017 found that the schools with MGT had a negative and statistically significant association with retention. The retention rate decreased by nearly 7 percentage points in MGT schools with fewer than three teachers. Higher retention rates in MGT schools can contribute to a less supportive and effective learning environment, which in turn can lead to lower student assessment scores. Consequently, MGT schools had a statistically significant and negative impact on students' test scores. In MGT schools, test scores decreased by 5.5 percentage points as compared to monograde schools.

However, MGT is not necessarily a disadvantage for schools. If done properly, MGT responds to many challenges and needs including increased access to education where MGT schools are established in sparsely populated areas, improved learning outcomes through differentiated learning practices required by multigrade classroom settings and modeled behaviour by older learners giving more opportunities for younger learners to learn and grow<sup>6</sup>. MGT settings have also been found to result in better non-cognitive outcomes including better attitudes towards self, peers, and the schools compared with the monograde settings<sup>7,8</sup>. Other benefits include improved learning process as a result of problem solving and collaborative learning, refined communication skills, increased confidence as students tend to each other. better student-teacher help relationship and continuous reiteration and revisitation of topics<sup>9</sup>.



MGT is practiced in several countries like Australia, Canada, United States, Brazil, South Africa, Philippines, India and New Zealand. Essential features of successful multigrade teaching and learning include proper grouping of students, a flexible curriculum that addresses the learning needs of all groups, professionally trained teachers, providing individualised instruction, encouraging collaborative learning and managing the classroom effectively.

<sup>4</sup> KP Equity Strategy, 2017

Gambia. The World Bank

<sup>&</sup>lt;sup>3</sup> https://www.mona.uwi.edu/cop/sites/default/files/resource/files/Multigrade%20teaching%20-%20strategies.pdf

<sup>&</sup>lt;sup>5</sup> Retention refers to the percentage of students who are held back or repeat a grade level. When retention rates increase, it often indicates that more students are struggling academically and are unable to progress to the next grade level.

<sup>&</sup>lt;sup>6</sup> Ballesteros, M., & Ocampo, R. O. (2016). Best practices of multigrade teaching in luna, Apayao, Philippines. International Journal of Novel Research in Education and Learning, 3(6), 61-73. P.64

<sup>&</sup>lt;sup>7</sup> See McEwan, P. J. (2008). Evaluating multigrade school reform in Latin America. Comparative Education, 44(4), 465-483. <sup>8</sup> Mulkeen, A. G., & Higgins, C. (2009). Multigrade Teaching in Sub-Saharan Africa Lessons from Uganda, Senegal, and the

<sup>9</sup> https://www.mona.uwi.edu/cop/sites/default/files/resource/files/Multigrade%20teaching%20-%20strategies.pdf



SECTION

2

Approach & Methodology

## Approach and Methodology

The technical approach for this study is informed by the KP MGT strategy outlining the MGT best practices and the specific actions required to achieve those practices. The technical approach also includes KIIs, FGDs, consultations with key stakeholders including Directorate of Professional Development (DPD) and Directorate Curriculum and Teacher Education (DCTE) as well as visit to selected schools with multigrade settings to conduct classroom observations. The approach also takes into account the current school education statistics and related reports in KP delineating the MGT situation in the province.

#### » Desk Review and Literature Survey

Desk review included study of KP MGT Strategy 2021 and the KP school census/education statistics as well as the study of DCTE's initiative to enhance the efficacy of teaching FLN in multigrade settings.

#### » Data Collection Tools

The team developed data collection tools to collect data from schools, classrooms and relevant stakeholders. Desk review as well as the literature survey was used to inform the development of data collection tools. These tools included semi-structured interview protocols developed for focus group discussions with teachers, Assistant Sub Divisional Education Officer (ASDEOs) and

SLs and for key informant interview with HTs. Data collection tools are attached at the annexure-A.

#### » Data Collection

After the data collection tools were developed, the team prepared a plan for the school visits and meetings with the stakeholders. Classroom observations were conducted to triangulate the data collected through KIIs and FGDs. To collect anecdotal evidence, the team visited three schools in Peshawar and conducted Key Informant Interviews with the relevant stakeholders. The list of schools visited for classroom observations and participants (Teachers, HTs, ASDEOs and SLs) for KIIs is attached at the annexure-B.

#### » Data Analysis and Reporting

Responses were populated into a database and thematic analysis was conducted. Initial insights were derived from the education statistics, interview notes, consultations, FGDs observations. Content was coded and codes were then organised into themes. These themes underwent a rigorous review to ensure that they were an accurate representation of the data. Subsequently, the themes were categorised, and findings the were presented. Detailed recommendations were provided for E&SED and the DE&SE as well as other relevant stakeholders to improve MGT practices in classrooms.





SECTION

3

Literature Review



Vultigrade instruction is a common practice observed in educational systems worldwide, particularly prevalent in developing nations and anticipated to increase (Mason & Burns, 1997; Mason & Doepner, 1998; Russell, Rowe, & Hill, 1998; Veenman, 1995). Multigrade classrooms typically maintain distinct grade textbooks. and curricula. a characteristic frequently observed in remote rural regions where resource limitations make assigning one teacher per grade impractical, although urban areas may encounter similar challenges due to fluctuating enrolment figures.

Although multigrade teaching is perceived as more demanding than single-grade instruction (Mason & Burns, 1996; Mason & Doepner, 1998; Veenman & Raemaekers, 1995), effective teaching principles can be adapted across contexts (Miller, 1991; Phillips, Watson, & Willie, 1995; Pratt & Treacy, 1986; Thomas & Shaw, 1992). Despite the varied terms used globally to describe multigrade teaching situations, such as mixed year, combination class, or split class (Berry & Little, 2006), the underlying challenges and pedagogical strategies remain consistent.

Little (2006) and Mathot (2001) underscore several factors contributing to the adoption of multigrade teaching, including the unavailability of adequate teachers or classrooms to ensure one teacher per grade. While multigrade settings often involve grouping two levels together, teachers must balance grade-specific work while providing equal learning opportunities for all students (Little, 2001). However, challenges persist, particularly in rural areas, where teachers trained for single-grade instruction may lack the necessary skills to manage multigrade classes (Mathot, 2001).



Research indicates that learners in multigrade settings perform equally or better than their single-grade counterparts and may outperform single-grade students in terms of achievements (Miller, 1990).



Moreover, due to time constraints, students in multigrade settings typically assume responsibility for their own assessments, which encourages their learning and achievements as it motivates them to develop self-regulated skills (Hargreaves, 2001). Multigrade teachers can acknowledge and utilise the diverse strengths and experiences students bring to these classes to foster a culture of differentiated and intrinsically motivated learning. Reciprocal teaching, an instructional approach where students provide support to each other, is considered crucial in multigrade settings (Veenman, 1995).

The responsibilities of multigrade teachers and the classroom environment as discussed by Miller (1991), include being highly organised and dedicating considerable time to preparation. They must establish clear routines and foster a supportive atmosphere conducive to cooperation and solidarity among students. In developing contexts like Pakistan, the approach to teaching in multigrade settings often involves integrating similar or related concepts across different levels. However, this approach may present challenges, particularly in countries where the curriculum is designed for single-grade instruction. Despite existing challenges, multigrade teaching persists, and efforts to enhance pedagogical skills for such settings, particularly in rural areas, are underway (White & Reid, 2008). Research underscores the demands multigrade complexity and of classrooms, emphasising the need for well-trained teachers capable of effectively managing such environments (Miller, 1991).

Prior examinations of teacher practices and research reviews have resulted in a comprehensive categorisation of curriculum approaches in multi-grade classes (Little, 2004). These approaches include multi-year curriculum spans, differentiated curricula, quasi monograde and learner and materials-centred.

As a division of the Aga Khan University-Institute for Educational Development (AKU-IED), the Professional Development Centre, Chitral (PDCC) has been operational in Chitral since 2003.



PDCC collaborates closely with partner organisations including the government education department, the Aga Khan Education Service Pakistan, the private education sector, and various NGOs.

Its primary objective is to enhance the quality of teaching and learning in schools by empowering teachers, head teachers, and other stakeholders. PDCC aims to develop and implement professional development courses and school improvement initiatives tailored to the specific needs of the local context, schools, and educators. Nawab and Baig (2011) studied one such course developed by PDCC, the School Improvement in Multigrade Situation (SIMS) course, designed to address the challenges faced by schools with multigrade settings, where two to three teachers oversee six classes due to teacher and space constraints. In such settings, multiple grades are often accommodated in a single classroom, with teachers rotating between groups. However, the teaching approach tends to prioritise one group while leaving the other idle, leading to concerns about the quality of learning experiences and their long-term impact on student

Previous studies, such as Khan (2006), have shown positive outcomes from implementing the SIMS model, although these studies primarily



PDCC recognises the urgency of the issue and has developed the SIMS model, an indigenous initiative aimed at enhancing teachers' content knowledge and pedagogical skills, particularly in multigrade teaching settings.

involved action research where researchers collaborated closely with teachers to implement SIMS course strategies.

The primary obstacle encountered during the course pertained to the diverse mediums of textbooks utilised. In the scope of this investigation, both English and Urdu mediums are employed for primary-level textbooks. Government schools utilise Urdu medium, private schools opt for English medium, while Aga Khan Schools adopt English medium up to class 3 and transition to Urdu medium from class 4 onwards. As the SIMS course welcomed teachers from all three sectors, course facilitators faced considerable challenges in devising concept grids amidst such varied groups. Despite these hurdles, facilitators prioritised the integration of concepts and skills, irrespective of the textbook medium. Ideally, the inclusion of two teachers from each school in the SIMS course facilitates smoother implementation of the concept. A more comprehensive understanding of the challenges and opportunities in implementing SIMS strategies without direct facilitator support is needed.



In developing countries like Pakistan, the prevailing approach to teaching in multigrade settings involves accommodating two or more grade levels within a single classroom.



Typically, a teacher instructs one level and then transitions to the next, engaging the first group in activities like reading. While this method is commonly employed, it doesn't fully align with the essence of multigrade instruction, which emphasises integrating similar or related concepts/themes across different levels.



According to Birch and Lally (1995), integration in multigrade settings can take two forms: integrating pupils from different grades and competencies, and integrating the curriculum by subjects, subject ranges, or topics.

Birch and Lally note that this integration poses challenges for primary school teachers, who must possess comprehensive knowledge across various subjects and grade levels. Integrating concepts from different subjects can be particularly daunting, especially in countries where the curriculum is designed for single-grade instruction. In contrast to single-grade instruction, multigrade settings often involve grouping two levels together, with teachers preparing activities that allow both grades to collaborate.



As Little (2001) suggests, teachers reduce the amount of grade-specific sequential work and establish similar or slightly different objectives for both levels, providing equal learning opportunities for all students.

Despite the continued existence of multigrade settings in Pakistan, the government's approach to addressing these challenges, especially in rural areas, has been unsatisfactory. Teachers trained for single-grade instruction are often tasked with teaching in multigrade environments. White and Reid (2008) emphasise the importance of tailoring teacher training to the specific needs and realities of the teaching context.



SECTION

4

Findings



# FINDINGS

This section provides analysis and findings based on the data collected from different sources as shared above.



#### Multigrade Teaching Strategy Khyber Pakhtunkhwa

The general direction of the unstated policy in KP maintains provision of a teacher for each classroom in the province and E&SED aims to meet the requirement of teacher shortage. However, teacher shortage, as stated above, remains constant challenge. Hence a medium-term strategy guideline was needed to enable the schools to make best use of the existing teaching resources. KESP-TA developed MGT strategy guidelines in 2021 to support the department, schools, teachers stakeholders to implement best MGT practices and improve teaching quality and learning outcomes in classrooms.

The strategy makes following recommendations for improved practices in MGT based on research.

01

Optimal size of combined multigrade class should be less than 40.

02

Best practices in MGT suggest combining adjacent/contiguous grades, for example grades 1 and 2, grades 2 and 3, grades 4 and 5.

03

The multigrade classrooms should use a common timetable, teaching same subject to combined grades.

04

Teachers should be provided with training and support material.

Following actions are proposed in the MGT strategy to support recommendations:

#### **»** Actions by the HTs

With support from SLs and ASDEOs, HTs should develop a School Multigrading plan to combine grades in accordance with the best practices such that the number of combined grades do not exceed three, the size of multigrade class does not exceed 40 and only contiguous grades are combined.

#### » Actions by the DE&SE

DE&SE should identify the needs for teachers based on student enrolment, and take necessary steps for recruitment, allocation and rationalisation of teachers.

#### » Actions by the DPD and DCTE

DPD should develop customised training programmes for teachers and adapt academic calendar and lesson plans to multigrade classes. DCTE should develop an assessment strategy for multigrade classrooms and teachers should be trained accordingly.

#### » Actions by the EMA

EMA should develop indicators to monitor implementation of MGT guidelines in schools.

The strategy offers a comprehensive and systematic approach to address the unique challenges of MGT and ensure quality education across diverse classroom settings. Once approved, a comprehensive implementation plan will be developed in consultation with the E&SED and other relevant stakeholders. The plan will determine the short term and long-term goals in line with the overall vision and objectives of the MGT strategy along with a roadmap and a costing plan to successfully implement the activities needed to achieve these goals. The strategy is pending approval and adoption by the department. The reluctance to adopt multigrade teaching policy stems from the department's policy that mandates one teacher per classroom, and doesn't recognise prevalence of MGT. Moreover, official adoption necessitates extensive reforms in the long run, including separate curricula, textbooks and assessments, posing challenges within current budget constraints.

## MGT collated from the KP Educaton Statistics

According to the KP EMA School data 2022-23, distribution of schools by number of posted teachers is given below:

Number of teachers posted	Boys Schools	Girls Schools	Total Schools
2	695	1431	2126
3	3856	3483	7339
4	3111	1883	4994
5	2216	1270	3486
>=6	1717	836	2553
	3718	1684	5402
			Grand Total = 25900

Table 1: Number of teachers posted in schools

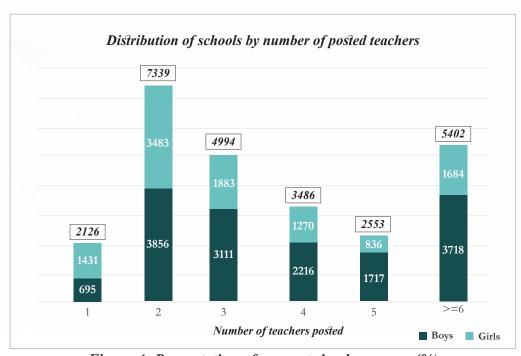


Figure 4: Presentation of concepts in classrooms (%)

The figure 1 highlights the distribution of schools according to the number of posted teachers. Among the 25,900 stand-alone primary schools, only 5,402 schools, accounting for 20.8% of the total, have six or more teachers available, enabling the provision of one teacher per grade. Conversely, the vast majority, constituting 79.2% of the schools, are multigrade schools, with five or fewer teachers. Within this category, a significant proportion of 14,459 schools, equivalent to 55.8%, are operating with three or fewer teachers, underscoring the pronounced prevalence of multigrade schooling in the province. This distribution highlights the situation of the multigrade teaching in the province, necessitating targeted interventions to address the challenges posed by limited teacher availability in many primary schools.

## DCTE's initiative to enhance the efficacy of teaching FLN in multigrade settings

E&SED, in collaboration with UNICEF and the Global Partnership for Education (GPE), is implementing the FLN programme, which aims to facilitate teaching foundational literacy and numeracy (grades 1-3) for teachers in multigrade settings. To pilot this initiative, DCTE, along with its implementation partners, developed a scheme of studies in English, Urdu, and Math for grades 1-3 aligned with the National Curriculum. Supplementary materials for students were developed in the form of separate booklets for grades 1, 2, and 3, each covering topics from English, Urdu, and Math. The activities are sequenced and distributed over specific months so

that similar SLOs of the same subject for grades 1, 2, and 3 can be covered in the same month. The plans include textbook page references, making implementation easier for teachers.

DCTE also developed an instructional guide for teachers focusing on multigrade teaching strategies, participatory approaches, active learning activities, presentation techniques, and handling multigrade teaching, among others, through a 7-day orientation programme.



It is important to note that the curriculum and formative assessment system for the pilot are the same as those for monograde settings, and the programme aims to enhance teachers' pedagogical skills for multigrade settings.

The pilot was launched in January 2024 and has been operational in selected 20 districts. Monitoring results will reveal the level of success achieved by

the programme.

## ( ) Current practices in MGT

Our analysis has highlighted that the practices currently implemented in schools do not follow the best practices in MGT. Following is a summary of current MGT practices based on our analysis:

## 1. Grade Combinations

Our analysis reveals significant variations in how teachers combined grades across different schools, with some arrangements proving disruptive while others appeared more conducive to learning. For instance, in School 1, the teacher combined Grade 1 and Grade 5 in one classroom and Grade 2 & 3 in another classroom resulting in challenges for both teachers and students. The disparity in grade levels hinder the implementation of appropriate teaching strategies tailored to each grade's specific needs.



Younger students in Grade 1 require more foundational instruction and support, whereas older students in Grade 5 are typically engaged in more complex and advanced concepts.

Managing such a wide range of abilities and catering to the diverse learning needs of both groups simultaneously can strain teacher resources and hinder effective instruction. Additionally, the potential for disruptions and distractions arising from the differing maturity levels and interests of students across these grades can further complicate the tteaching and learning process.

Similarly, in School 2, where the Head Teacher instructed Grade 1 students to sit outside the classroom while the teacher focused on teaching Grade 4, the arrangement posed significant challenges.

<sup>&</sup>lt;sup>10</sup> One girl student who was promoted from grade 5 to grade 6 continues attending the same school because middle school is far away.

This segregation of students not only marginalised and excluded Grade 1 students but also disrupted the learning environment for both grades with Grade 4 students being distracted by the presence of Grade 1 students outside the classroom.

Conversely, in School 3, the recommended grade combination was followed where teachers combined KG and Grade 1 in one classroom, Grades 2 and 3 in another classroom and Grades 4,5 and 6<sup>10</sup> in the third classroom. A more conducive learning environment was observed. By aligning grade combinations according to best practices outlined in the literature (grouping consecutive grades together), teachers were better able to address the diverse needs of students within each grade level. For example, combining Grade 1 and Grade 2 allowed teachers to implement developmentally appropriate teaching strategies and provide targeted support to students at similar stages of learning.

Drawing from our literature review, we found that optimal grade combinations in multigrade classrooms involve grouping consecutive grade levels together, minimising the developmental and academic disparities between students within each group. By adopting such practices, schools can create a more supportive and conducive learning environment for both teachers and students.



Figure 2: Grade 1 and Grade 4 combined



#### 2. Classroom Management

Classroom management is an essential skill for teachers to ensure better learning for their students in a multigrade setting. Participants of FGDs shared that they were unable to engage multi grades at the same time.



Some teachers appoint class leaders from among the senior students who take charge of one grade while the teacher teaches the other grade, resulting in confusion.

Segregation also allowed only one group to be attended by the teacher, while the other remained unattended. Additionally, some classrooms did not have adequate space to accommodate the students, thereby resulting in increased noise and reduced concentration of students. In school 1, a teacher was teaching different subjects to both grades resulting in an increased workload for the and confusion for students. teachers Participants from School 3 demonstrated teaching common lessons together and keeping both grades engaged with questions of different levels, especially in Mathematics and suggested this practice to be adopted by all teachers.



They also suggested incorporating play based teaching and activities in between lessons to keep the students motivated and engaged.



#### Excerpt from a classroom observation

"Kashif Ayaz is a primary school teacher (PST) at Government Primary School Zaryab Colony. Given that there are only four PSTs in his school, including the headteacher, Kashif teaches a combined class of grade 2 and 3 in a multigrade setting. The classroom is equipped with two boards. He arranges the grade 2 students to face one side of the classroom, while the grade 3 students turn their backs toward grade 2, facing the other side as shown in Figure 3. Kashif initiated the lesson by teaching basic multiplication to grade 2, solving a few sums, while grade 3 students remained idle. After 5-10 minutes of teaching grade 2, he assigned them classwork, appointed a class leader to supervise them, and moved to the other side of the classroom – grade 3. Here, he started teaching English reading to class 3. Kashif read a passage, noted down vocabulary words on the board, asked students to write those words in their notebooks, and then returned to grade 2, continuing this practice of teaching the two grades separately within the same period."



Figure 3: Kashif Ayaz teaching grade 2 and 3 together

...

Our consultations with the DPD revealed that despite realising the importance of class-room management, the DPD hasn't offered any training for classroom management in MGT due to budgetary constraints.

## 3. Curriculum coverage

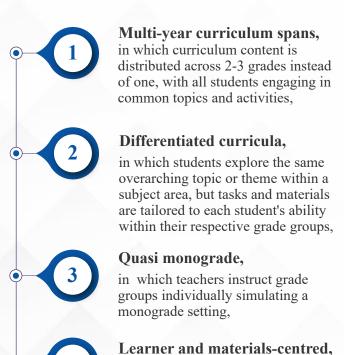
Participants in the study also described their inability to achieve learning objectives and coverage of curriculum for multigrade classes. In school 1, teachers reported that they could only cover 60% of the curriculum for both classes in multigrade setting. They explained that teachers have to modify the academic calendar according to their needs, resulting in reducing course content.



In school 2, the teacher taught both classes separately, leading to less than 50% of the syllabus covered.

Participants from School 1 were of the opinion that course content must be reduced, activities that are common to grades should be implemented, and the course content of two grades must complement each other.

Literature review highlights approaches to multigrade teaching that includes,



in which curriculum is translated

into graded self-study guides,

allowing students to progress at

their own pace while receiving support from the teacher.

Our consultations with the DCTE revealed that creating a separate or reduced curriculum for MGT would necessitate policy-level changes and cabinet approval, which is a lengthy process. Developing a distinct multigrade curriculum also poses practical challenges, such as the need for separate textbooks and formative assessment systems. Implementing two parallel curricula in the province would have significant implications.

Therefore, the DCTE views this as an impractical approach and instead focuses on enhancing teachers' pedagogical skills for teaching in multigrade settings until a policy decision is made regarding a separate curriculum for multigrades.

## 4. Lack of resources for teachers

To address the challenges and support effective multigrade teaching, it is imperative to provide teachers with the necessary resources and support systems. This includes access to adequate teaching materials, such as lesson plans, workbooks, and supplementary resources, tailored to the diverse needs of students across multiple grade levels. Additionally, providing teachers with professional development opportunities focused on multigrade teaching strategies and curriculum adaptation is essential for enhancing their capacity to effectively manage multigrade classrooms.

Participants from School 1 stated that the lesson plans provided to them do not reflect reality of multigrade classroom as they are designed primarily for monograde classrooms, and therefore teachers have to devise their own strategies to deliver the lesson as instruction time for both grades is practically reduced to half. Teachers from School 3 stated that there was no academic calendar or lesson plans specifically catering to multigrade schools.

All participants emphasised the need to actively involve teachers and revise lesson plans so that they respond to MGT situation and students' level in accordance with the learning objectives. Furthermore, they recommended the use of low cost/no cost teaching resources and audiovisual aids to enhance the learning experience of students.



(DCTE) has developed supplementary materials tailored specifically for teachers in MGT settings, aimed at supporting the teaching of FLN.

These materials include a range of engaging activities designed to facilitate FLN instruction using an integrated approach, ensuring that teachers are equipped with resources that effectively address the diverse needs of students across multiple grade levels within a single classroom. However, beyond foundational literacy and numeracy, there is a lack of resources to support teachers.



Figure 4: Grade KG, nursery and 1 combined (100 + students)



It is pertinent to emphasise that a significant portion, approximately 70%, of schools within the district are engaged in multigrade teaching, indi-

cating the critical need for targeted support and training in this area. So far, no specific training has been planned for teachers doing MGT.



Our consultations with the DPD reveal that the DPD operates within a fixed budget allocated for various aspects of professional development, including teacher induction and continuous professional development (CPD).

As such, resources are often constrained, and the department may not have the flexibility to allocate funds for additional interventions, such as training on MGT.

All participants agreed on the need for provision of teacher training specific to MGT strategies. These include classroom management, time management, grouping of students, creating a conducive learning environment and incorporation of technology to improve efficacy of teaching and learning in multigrade setting.

Teachers also stressed upon the need to deliver the training in close proximity of their schools and preferred face-to-face training or blended mode as opposed to online mode of delivery.

Moving forward, it is essential for stakeholders to recognise importance of addressing the needs of multigrade schools and prioritise the allocation of resources accordingly. Advocating for increased funding and support from higher authorities can help facilitate the implementation of MGT training initiatives within the district. Additionally, exploring alternative or collaborative sources funding partnerships with external organisations may offer potential avenues for delivering such training on multigrade future. teaching in the



Besides recognising the necessity of teacher training in MGT, teachers expressed a desire for mentoring and coaching opportunities from HTs, ASDEOs and SLs. FGDs with ASDEOs and SLs revealed that both groups lack the necessary skills to coach and mentor teachers on specific MGTrelated issues.

ASDEOs are often occupied with administrative tasks and have limited opportunities for school visits, while SLs, who are recently recruited, have not received adequate training to provide follow-up support to teachers in MGT settings.

#### 6. Teachers' Professional networks

All participants unanimously agreed that it was essential to interact with other teachers regularly in professional settings, either face to face or via WhatsApp in order to enhance their professional growth. These professional communities or networks can be moderated by SLs or ASDEOs and will provide teachers an opportunity to share their challenges, best practices and learn from each other.

Furthermore, fostering collaboration and peer learning among teachers within and across schools can facilitate the sharing of best practices, instructional resources, and lesson ultimately enhancing the quality of instruction in multigrade classrooms.



**SECTION** 



Recommendations & Way Forward



# RECOMMENDATIONS AND WAY FORWARD



Our findings have highlighted prevalent issues in mutigrade teaching practices in the province. Following recommendations are proposed to address the above-mentioned issues:

## • Officially Adopting the Multigrade Teaching and Learning Strategy

Khyber Pakhtunkhwa Education Sector Programme (KESP) Technical Assistance (TA) team in consultation with the Directorate of Elementary and Secondary Education (DE&SE) developed a Multigrade teaching strategy in 2021 to support Elementary and Secondary Education Department (E&SED) in its efforts to improve multigrade teaching practices. The strategy describes best practices in MGT for the E&SED, schools, teachers and other relevant officials to implement and adopt to improve teaching quality and learning outcomes in schools. These best practices relate to optimal class size, combining adjacent grades, using a common timetable and providing teachers with training and support material. It also specifies actions to be performed by the DE&SE, Headteachers (HTs), DPD, DCTE and KP Education Monitoring Authority (EMA). The strategy is yet to be notified by the E&SED. The Multigrade Teaching and Learning Strategy, developed in 2021, describes best practices in MGT, aims to improve multigrade teaching practices in the province and specifies actions to be perfomed by all stakeholders. To ensure effective implementation of the strategy, its approval and notification are imperative. This will transform interventions directed at MGT into continuous and sustainable initiatives. Additionally, it will facilitate collaboration with development partners and other donor-led initiatives.

For the government to officially adopt Multigrade Teaching & Learning Strategy, there needs to be stronger advocacy efforts to raise awareness about the benefits of adopting the strategy and the importance of accommodating diverse classroom settings within official policies especially because the current policies are essentially catering to only 15 % monograde schools. This could involve engaging key stakeholders, including policymakers, educators, and community members, to garner support for the adoption of the strategy.

## **→** Curriculum Mapping

Given the prevalence of multigrade teaching in the province, the curriculum should be adapted to cater to multigrade classrooms and teaching and learning resources should be developed accordingly. However, developing a completely new stream for MGT might pose challenges and caveats, including the proclaimed commitment of the government to assign one teacher per grade.



To respond to the needs of teachers and learners in multigrade classrooms in a more practical way, the curriculum should be mapped to identify common and differentiated themes and possible alignments between learning outcomes.



## Development of teaching and learning material and formative assessment strategies

Following the curriculum mapping, teachers should be trained and supported to develop the following teaching and learning material in multigrade classrooms.

#### » Academic Calendar

In line with the curreiulum mapping, an academic calendar should be developed responding to the adjacent grade combinations. The academic calendar will outline exactly which SLOs and topics teachers should teach to both grades combined in multigrade setting.

#### » Lesson plans

Once the academic calendar is developed, scripted lesson plans should be developed specifically for multigrade classrooms covering all topics in all subjects aligned with the academic calendar. The lesson plans should also focus on strategies that teachers can adopt for better engagement of both grades, including differentiated teaching customised to learning needs of all students in both grades.

#### » Worksheets

Lesson plans should be supplemented with worksheets developed for students of both grades keeping in mind principles of differentiated learning. The worksheets support students in achieving grade level proficiency, in line with the specific student learning outcomes of the relevant grades.

#### » Formative Assessment Strategies

Formative assessment supports teachers in class-room to assess their students' learning and use the results to inform and improve their teaching practices. In a multigrade setting, since learners of different grades are sitting together, the practice of formative assessment becomes even more crucial so that the teachers are able to respond to the individual needs of students. Hence, formative assessment strategies should be developed for the improved teaching practices of the teachers. The DCTE should develop a framework for formative assessment, and DPD should then train teachers accordingly.



A holistic intervention encompassing all of the aforementioned elements must be pilot tested. Learning from the pilot should then be used to improve the design and fill in the implementation gaps.

## • Teacher Training

A comprehensive teacher training programme should be developed and delivered by the DPD to support teachers in understanding best practices in MGT with support from development partners. This programme should cover various aspects such as class grouping, class management, lesson planning, conducting and using formative assessment and evaluation strategies, and implementing MGT practices in classrooms.

Additionally, teachers should be provided with teaching and learning materials developed specifically for MGT, and the training programme should be integrated into teachers' continuous professional development (CPD). Regular refreshers should be offered to ensure that teachers are fully trained in MGT practices.



Furthermore, the DCTE's intervention aimed at enhancing the teaching of FLN in multigrade settings should be evaluated upon completion of the pilot. The findings should be used to identify complementarities and differences to improve the design of the MGT teacher training programme.

# Teacher Support provided by SLs and HTs

HTs play a crucial role in providing support and mentoring for teachers, especially in MGT settings. With the addition of SLs as providers of coaching and mentoring to PSTs, it has become essential to train them in MGT best practices and equip them with the necessary skills and tools to offer ongoing support to multigrade teachers as part of their CPD.



This school-based support provided by HTs and SLs can significantly assist teachers in resolving issues, reflecting on their practices, and gradually improving them. Establishing robust support mechanisms through both HTs and SLs is imperative.

The DPD must plan, design, and deliver training to HTs and SLs to provide mentoring and coaching related to MGT issues and challenges. More opportunities should be provided to teachers to present their lessons in front of their peers, trainers, mentors and coaches, promoting a participatory learning environment. This practical aspect can significantly enhance the application of learned strategies in real classroom scenarios.

# (a) Integration of MGT Training into Teacher Education Programmes

MGT training should be incorporated into pre-service teacher education programmes. Many teachers completing these pre-service training programmes are often unaware of the unique challenges associated with the MGT. Teacher education programmes need to integrate robust components focusing on MGT, encompassing both theoretical understanding and practical dimensions. Given the number of schools in KP where MGT is in practice, there is a need to put a special emphasis on content areas within the context of MGT in teacher education programmes to ensure that teachers are adequately prepared and equipped with the necessary knowledge and skills to teach in MG classrooms.

## Professional development communities

It is very important to develop professional communities of teachers who teach in multigrade setting so that they can develop professional network, collaborate with their peers, learn from each others' challenges and success stories. These communities can be developed and moderated by SLs with support from HTs. The DPD will need to play a crucial role in conceptualising the professional communities and networks, identifying activities, developing resources, and then training SLs and others to facilitate such networks.



Implementation of these recommendations by the DPD and the DCTE holds the potential to bring about improvements in MGT practices across KP.

This will result in creating an environment conducive to effective teaching and learning for all children, contributing significantly to improved student learning outcomes and fostering a more enriching educational experience in the context of MGT.

## **Proposed Solutions:**

In line with the recommendations outlined above, below we present the proposed solutions to increase the efficacy of multigrade teaching in the province.

	Proposed Solutions	Responsibility
1.	Engage key stakeholders, such as policymakers, educators, and community leaders, to build momentum for the adoption of the MGT strategy and collaborate with these groups to advocate for government approval and broader recognition of the MGT approach.	TA
2.	Develop a separate COT for multigrade classrooms. Train HTs and SLs on the tool and use the results from COT to inform future training programmes.	DPD with support from TA
3.	Pilot MGT training programme with a focus on training teachers on grades combinations, MGT strategies, lesson planning and formative assessment strategies for multigrades. Deliver the content through a blended approach, allowing teachers to learn at their own pace with modular content. Include opportunities for practical classroom application, reflection, and discussions with SLs and HTs, who will mentor teachers and provide feedback throughout the process.	DPD with support from TA
4.	Develop professional communities of multigrade teachers to foster collaboration and shared learning. Strengthen these communities through a combination of online platforms and in-person meetings, facilitated by SLs and HTs, to ensure ongoing support and resource sharing.	DPD



SECTION

Conclusion



# Conclusion





The literature on MGT suggests that MGT is not always a disadvantage and that, if done well, it improved student learning outcomes, non-cognitive skills and access to education. Our findings have concluded that MGT implemented in the context of KP is not in alignment with best practices observed globally. Several challenges highlighted in the multigrade setting include teachers being unable to group classes correctly, poor classroom management, less curriculum coverage, and the absence of teacher training, support and professional development opportunities. This underscores the need to take significant steps to improve teaching and learning practices in multigrade classrooms. These steps include

curriculum mapping, developing lesson plans and worksheets aligned with grades combination, development of formative assessment strategies for teachers, designing and delivering teacher training programmes, and developing teacher support mechanisms and professional networks through HTs and SLs.



Through the implementation of these activities, multigrade teaching practices can be significantly improved in the province, resulting in improved learning outcomes for students.



# ANNEXURE-A DATA COLLECTION TOOLS

## • Guide for FGD moderators

Begin each focus group discussion your introduction. Inform participants of the primary objectives of the study, which aims to identify current situation of Multigrade teaching practices and areas for improvement.

During the discussion, encourage participants to delve into their experiences and perspectives. The aim is to gather valuable feedback to shape strategic improvements that align with international best practices and contribute to the continual enhancement of teaching quality in Khyber Pakhtunkhwa.

The participants' candid reflections and input in this discussion will play a crucial role in shaping the future trajectory of the MGT training programme for teachers. Use the following questions as prompts for the discussion with each group of respondents.

### (3) KII with headteachers



What are the challenges teachers face in multigrade classrooms?



Are teachers able to give attention to both classes and complete the curriculum?



How do students perform in your multigrade school?

04

Do teachers need support/training in catering to the needs of children in multigrade setting? What sort of support (lesson plans, teacher training)

## → FGD with Teachers

- 1. What are the challenges that you face teaching in multigrade teaching classrooms?
- 2. How do you greiup multiple grades?
- 3. Are you able to follow the academic calendar for both grades?
- 4. Do students of both grades get equal attention?
- 5. How do you split your time to teach both grades?
- 6. Do you have sufficient time to cover curriculum of both grades with ease?
- 7. How do you engage the other class when you are teaching one class?
- 8. What sort of activities do you do to keep both classes engaged?
- 9. Do you receive lesson plans for monograde classrooms? Are they of any use for multigrade classes? To what extent?
- 10. How do students perform in your multigrade classroom?

- 11. What support do you desire for teaching multigrade classes? What training would you like to receive?
- 12. What mode of training are you open to? What duration? At what time?
- 13. Do you want to receive lesson plans devel oped specifically for multigrade classes?
- 14. Do you want to receive training on developing your own lessons?
- 15. How do you use low-cost no-cost resources in your classes?
- 16. Would you like to receive more support in using low-cost no-cost resources in your classes?
- 17. Would you want to be a part of a professional network to collaborate with your peers, share best practices, challenges and propose solution?

### **→** FGD with ASDEOs/SLs

How often do you visit the school?

What is your role and responsibility?

What are multigrade teaching practices in the schools you visit?

Do you support teachers with their issues in multigrade teaching?

## Classroom Observation

01

Are students of both grades in a multigrade setting effectively being taught?

03

Is there a group who is not being directly taught? What are students of the group not being taught at the moment doing? Are they engaged in an activity? 02

Are both groups participating and learning? E.g. are they giving right answers to the teacher's questions?

04

Are students doing their assigned classwork?

# ANNEXURE B List of schools visited FOR CLASSROOM OBSERVATIONS

School	School label	Date of Visit	Teachers	Total Strength	Grade combinations
Govt Primary School Zaryab Colony	School 1	Oct 31, 2023	1 HT, 3 teachers	150	2 & 3 combined (41 students) 1 & 4 combined (45 students) 5 separate KG separate
Govt Primary School Nanakpura	School 2	Oct 31, 2023	1 HT, 2 teachers	200	KG & 1 combined (93 students) 2 & 3 combined (60 students) 4 & 5 combined (50)
Govt Girls Primary Ayaz School Badaber	School 3	Oct 31, 2023	1 HT, 2 teachers	160	KG & Nursery combined (105 students) 2 & 3 combined (25 students) 4 & 5 & 6 combined (30 students)

