**An Analysis of Teachers’ Training and Education in Balochistan-Pakistan:**

**Impact on Students’ Learning and Retention in Schools**

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## **Abstract**

This study investigates the impact of teacher training and education on student retention and learning outcomes across Balochistan province of Pakistan, incorporating evidence from diverse districts. Utilizing a mixed-methods approach, the research synthesizes quantitative data from teacher and student surveys with qualitative insights from interviews and focus group discussions involving teachers, parents, and policymakers. The findings reveal that teacher qualifications, regularity, lesson preparation, and professional development are strongly associated with improved student achievement and reduced dropout rates. However, persistent challenges, including teacher absenteeism, insufficient training, resource constraints, and politicized recruitment, continue to hinder educational progress, especially in rural and under-served areas. The study highlights the importance of supportive school leadership, community engagement, and targeted policy interventions. By addressing these factors, the research offers actionable recommendations to enhance teacher effectiveness and foster sustainable improvements in student retention and learning throughout Balochistan.

**Key Words:** Teacher Training, Student Learning, Student Retention, Education in Pakistan, Education in Balochistan

1. **Introduction**

Balochistan, area-wise Pakistan’s largest and least populated province, faces the country’s most acute educational challenges. Over 54% of children are out of school, and literacy rates, especially for girls are the lowest nationally (Niaz, 2021). District-level studies from Kech, Makran, Lasbela, Quetta, Pishin, Loralai, Zhob, Sibi, Ziarat, Killa Saifullah, and Killa Abdullah reveal that teacher absenteeism, lack of training, and resource constraints are widespread, with rural and northern districts particularly affected (Ali et al., 2025; Makran Division Study, 2023; Shakir, 2023; Niaz, 2021; Ahmed & Kiazi, 2022; Panezai & Shah, 2021; Yasmeen, 2023; Gul et al., 2023; Maria et al., 2024; Begum, 2020). The COVID-19 pandemic further exposed digital divides and the lack of teacher readiness for online education, with teachers citing limited electricity, weak internet, and insufficient training as major obstacles (Gul et al., 2023). These systemic issues directly impact student retention and learning outcomes, making the quality of teacher education a critical area for intervention.

1. **Literature Review**

*2.1 District and Provincial Evidence*

In Kech (Turbat), a survey of 236 teachers and 3,004 students found that well-trained and qualified teachers significantly improved students’ academic performance and retention (Ali et al., 2025). Democratic leadership styles among head teachers in girls’ schools were also found to correlate strongly with student achievement (Baloch, 2023). Habib (2022) highlighted that lack of basic facilities, teacher absenteeism, and insufficient monitoring were major barriers to quality education in rural Kech.

In Lasbela, positive, communicative teacher-student relationships and a conducive classroom environment significantly improved academic performance, though poverty, poor management, and dropout remain barriers (Shakir, 2023; Riaz et al., 2024). Mohammad et al. (2018) found that English language teaching in Lasbela is hampered by lack of teacher training, overcrowded classrooms, and poor infrastructure. In Naseerabad, teaching-learning materials significantly influence students' academic performance, engagement, and retention (Ahmed et al., 2024). In Sibi, community engagement and traditional knowledge are linked to educational outcomes (Maria et al., 2024).

In Makran Division, teacher regularity, lesson preparation, competency, and motivational strategies were all statistically significant predictors of student achievement (β = 0.156, p < 0.01), with recommendations to prioritize teacher regularity, subject expertise, and supportive learning environments (Makran Division Study, 2023).

In Quetta, both public and private schools suffer from weak pedagogical and assessment practices, with teachers expressing a need for more professional development (Niaz, 2021; Bibi et al., 2024). Yasmeen (2023) found that instructional leadership in Quetta and neighboring districts predicted up to 49% of the variance in science achievement.

Large-scale studies in Pishin, Sibi, Zhob, Ziarat, Killa Saifullah, and Killa Abdullah found that politicized recruitment, unqualified teachers, and absenteeism are widespread, especially in rural areas (Gul et al., 2023; Yasmeen, 2023). In Ziarat, principals’ leadership styles significantly affect teacher commitment and, by extension, student learning (Panezai & Shah, 2021).

### In Loralai, students taught by trained teachers showed better attitudes and performance in both academic and social activities (Ahmed & Kiazi, 2022). In Killa Abdullah, teacher competency in mathematics was found to be the only solution to retain students in primary classes, with training and encouragement leading to more motivated students (Begum, 2020).

*2.2 National, Regional, and International Evidence*

In Punjab and Sindh, regular, context-specific professional development improved student outcomes (Hussain et al., 2025; Ahmed et al., 2015). In India and Nepal, effective professional development and teacher qualifications are linked to better student engagement and achievement (Adhikari et al., 2024; Priya & Sangeeta, 2024). High-quality, subject-specific teacher training is crucial for student achievement, especially for disadvantaged groups (Sancassani, 2022; Kirsten et al., 2023).

1. **Research Gap**

Despite the breadth of research, there is a lack of localized, district-level studies for Balochistan’s diverse regions. Most interventions are modeled on other provinces or countries without sufficient adaptation to local realities. This study addresses this gap by providing district-level evidence and actionable recommendations.

1. **Methodology**

A mixed-methods approach was adopted, synthesizing findings from quantitative surveys, qualitative interviews, and FGDs. Quantitative data were collected from teachers and students in Makran, Kech, Lasbela, Quetta, Loralai, Sibi, Ziarat, and other districts (Makran Division Study, 2023; Ali et al., 2025; Shakir, 2023; Ahmed & Kiazi, 2022; Ahmed et al., 2024; Niaz, 2021; Yasmeen, 2023; Maria et al., 2024; Begum, 2020). Qualitative data included in-depth interviews and FGDs with head teachers, teachers, parents, and community members across multiple districts.

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## **Results**

Teacher qualifications, lesson preparation, and regularity are positively correlated with student achievement and retention across all regions (Ali et al., 2025; Makran Division Study, 2023; Shakir, 2023; Ahmed & Kiazi, 2022; Ahmed et al., 2024; Niaz, 2021; Yasmeen, 2023; Maria et al., 2024; Begum, 2020). Instructional leadership in Quetta, Pishin, Sibi, and Killa Abdullah predicts up to 49% of variance in science achievement (Yasmeen, 2023). Teacher absenteeism, lack of resources, and insufficient monitoring remain major barriers, especially in rural and northern districts (Gul et al., 2023; Yasmeen, 2023; Begum, 2020). Teachers in Quetta and Ziarat report that professional commitment and leadership support are crucial for student retention and learning (Panezai & Shah, 2021; Niaz, 2021). In Makran, regular homework, lesson planning, and extra support for weaker students were associated with improved academic performance (Makran Division Study, 2023). In Naseerabad, the availability and use of teaching-learning materials significantly improved engagement, retention, and exam performance (Ahmed et al., 2024).

1. **Discussion:**

The findings from Balochistan’s diverse districts reveal both shared and unique challenges in teacher education and its impact on student retention and learning. This section integrates direct voices from teachers, parents, and policymakers, and presents key data in tables and diagrams to provide a nuanced, professional analysis.

**6.1 Voices from the Field:**

*6.1.1 Teachers’ Perspective*

“When we receive regular training, we feel more confident and can use new methods to keep students interested. But many of us have not had any training in years.” (Secondary school teacher, Kech; Ali et al., 2025)  
“We try to help students, but without enough materials and with large class sizes, it is very difficult to keep them engaged and prevent dropouts.” (Teacher, Makran; Makran Division Study, 2023)  
“Teacher absenteeism is a big issue. Some of my colleagues are posted far from home and only come a few days a week. This affects students’ learning and attendance.” (Primary teacher, Naseerabad; Ahmed et al., 2024)

***6.1.2 Parents’ Perspectives***  
“My child’s teacher is always present and encourages her to ask questions. She loves going to school now.” (Parent, Lasbela; Shakir, 2023)  
“We want to support our children, but most of us are not educated and cannot help with homework. We need teachers to guide us too.” (Parent, Quetta; Gul et al., 2023)  
“Sometimes, teachers are not regular, and our children lose interest in school. The government should make sure teachers come every day.” (Parent, Naseerabad; Ahmed et al., 2024)

***6.1.3 Policymakers’ and Head Teachers’ Perspectives***  
“Professional development for teachers is essential, but we also need to address issues like politicized recruitment and lack of resources.” (Education official, Quetta; Chachar, 2023)  
“Involving parents and the local community is crucial for improving school quality and student retention.” (Head teacher, Makran; Makran Division Study, 2023)  
“Monitoring and evaluation systems must be strengthened to ensure teachers are performing and students are learning.” (Policy advisor, Balochistan; Ahmed et al., 2024)

**6.2 Quantitative Insights:**

#### **Table 1: Teacher-Related Factors and Student Academic Performance (Makran Division)**

|  |  |  |
| --- | --- | --- |
| **Statement** | **Mean (Students)** | **Mean (Teachers)** |
| Teachers are punctual and regularly attend school | 3.09 | 3.06 |
| Teachers demonstrate preparedness for their lessons | 3.51 | 3.63 |
| Teachers consistently follow well-structured lesson plans | 3.01 | 3.08 |
| Teachers exhibit competence in their teaching methods | 2.98 | 3.21 |
| Teachers assign regular and meaningful homework | 3.19 | 3.30 |
| Teachers foster a supportive environment that encourages learning | 3.09 | 3.27 |
| Teachers offer additional assistance to students who need it | 2.18 | 2.84 |

**Figure 1** Comparison of student and teacher perceptions of key teacher-related factors in Makran Division.

#### **Table 2: Head Teachers’ Perceptions on Improving Secondary Education (Province-wide)**

|  |  |
| --- | --- |
| **Item** | **Mean (N=36)** |
| Effectiveness of curriculum reforms | 3.83 |
| Importance of professional development for teachers | 3.25 |
| Availability of teaching aids and resources | 3.78 |
| Improved monitoring and evaluation system | 3.94 |
| Effectiveness of teacher-student engagement and interaction | 3.72 |
| Importance of involving parents and local community | 3.94 |
| Effectiveness of technology and digital resources | 3.78 |

**Figure 2** Head teachers’ ratings of key strategies for improving secondary education in Balochistan.

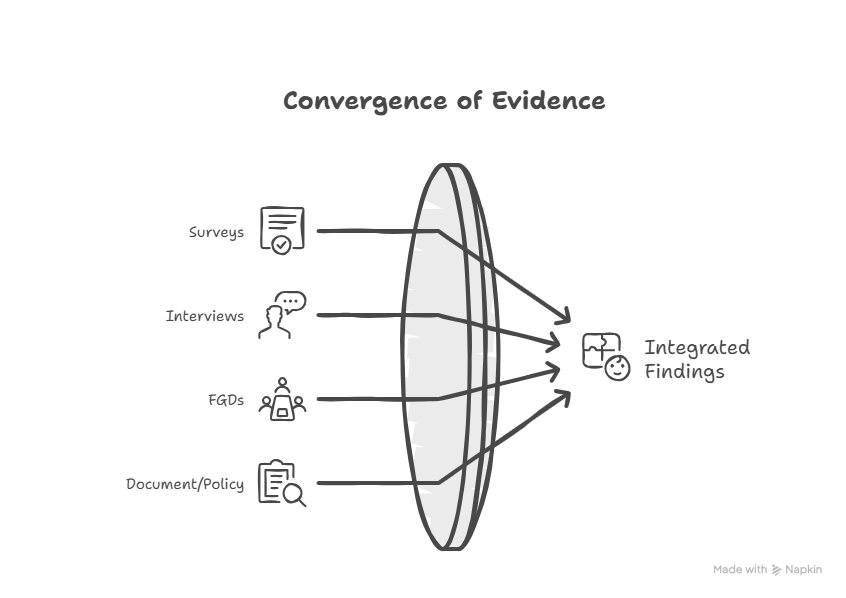
**6.3 Thematic Synthesis**

* **Teacher Qualifications and Training:** Strongly linked to improved student performance and retention (Ali et al., 2025; Makran Division Study, 2023).
* **Teacher Motivation and Regularity:** Absenteeism and lack of incentives undermine learning, especially in rural areas (Ahmed et al., 2024; Begum, 2020).
* **Parental and Community Involvement:** Essential for supporting student learning, especially during emergencies like COVID-19 (Gul et al., 2023).
* **School Leadership and Monitoring:** Effective leadership and robust evaluation systems are critical for sustaining improvements (Panezai & Shah, 2021).
* **Resource Availability:** Access to teaching-learning materials and digital resources remains uneven, affecting both teachers and students (Ahmed et al., 2024).

### **6.4 Integrating Qualitative and Quantitative Evidence**

The convergence of survey data, interviews, and focus group discussions underscores the urgent need for:

* **Targeted teacher training and professional development,** especially in underserved districts.
* **Transparent recruitment and regular monitoring** to reduce absenteeism and politicization.
* **Enhanced parental engagement** through communication and support strategies.
* **Investment in infrastructure and teaching materials** to create equitable learning environments.



## **Conclusions and Recommendations**

Teacher education is a critical determinant of student retention and learning in Balochistan. Well-qualified and trained teachers, supported by effective leadership, not only improve academic outcomes but also inspire students to remain in school. To maximize impact:

* Strengthen pre-service and in-service training, emphasizing subject expertise, pedagogical skills, and classroom management.
* Address teacher absenteeism and politicized recruitment through transparent recruitment, monitoring systems, and incentives.
* Invest in resources and infrastructure, ensuring access to teaching materials, digital tools, and ongoing professional development, particularly in rural and northern districts.
* Foster positive school environments and leadership to retain both teachers and students.

## **Significance of the Study and Research Gap**

This study fills a critical research gap by providing robust, district-level, context-sensitive evidence on the impact of teacher education in Balochistan, especially in its southern, coastal, northern, and rural regions. By triangulating quantitative and qualitative data and situating findings within broader regional and global literature, the paper offers actionable insights for policymakers, educational leaders, and practitioners.

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