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Teacher Quality and Regional Disparities in Elementary Education: A District-wise Analysis of Trained and Untrained Teachers in Manipur

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Abstract

This study focused on the secondary data of trained and untrained teachers in elementary schools of the district of Manipur with emphasis on the district-wise distribution, regional disparities, and trend during the period of 2020–21 to 2024–25 from the data source Unified District Information System for Education Plus (UDISE+). The study used descriptive and analytical approach of the research design to analyze teacher qualification status in all sixteen districts of the state. The results showed that there was a significant difference in the availability of professionally trained teachers between the different districts and between the hills and valleys. While there was moderate improvement in the proportion of trained teachers during the study period, the numbers of untrained teachers remain high in the elementary teaching force. The comparatively higher values of the Teacher Quality Index (TQI) were observed in Tamenglong and Thoubal while the highest percentage of untrained teachers was consistently observed in the Imphal West district. The study emphasizes the need to strengthen the teacher education institutions, regular recruitment of teachers and strict enforcement of professional norms in elementary education in Manipur in improving the quality of elementary education.

Keywords: Teacherquality, Professionalization, Elementaryeducation, Disparities

Introduction

Educational outcomes and effectiveness are known to depend heavily on the quality of the teachers and their preparation in providing education. Teachers make a tremendous difference in what is taught in their classrooms, instructional approaches, student engagement, and academic performance. The pedagogically competent professionals are well equipped with the curricular knowledge, classroom management and assessment skills, and pedagogical knowledge to facilitate meaningful learning experiences in the school. Previous studies have found that professionally qualified teachers make substantial positive contributions to instructional effectiveness and student achievement with innovative, learner-centered instruction (Darling-Hammond et al., 2020). In a similar fashion, teacher professional development improves the quality of teaching and learning in classrooms and schools, and teachers' ability to teach effectively, adaptively, and competently (Flores & Swennen, 2020).

In the world, teacher quality has become a significant issue in educational policy and reform. UNESCO and the Organisation for Economic Co-operation and Development (OECD) international organizations stress the importance of professionally qualified teachers to deliver equitable and quality education. UNESCO (2024) has pointed out that the lack of teachers, unequal distribution of teachers, and inadequate professional training are still significant obstacles to meeting Sustainable Development Goal 4: Quality Education. Similarly, OECD (2021) has highlighted that teacher quality and lifelong learning are essential for enhancing educational results and effectiveness of the institution. The viewpoints suggest that betterment in education is not only dependent upon infrastructure and curriculum renovations, but also upon the availability of professionally competent teachers.

The significance of teacher quality has also been put on the agenda in India, where various educational policies and regulatory frameworks have been established in recent times. Teacher education programmes are regulated by the National Council for Teacher Education (NCTE) and the minimum entry qualifications for school teachers are prescribed. The Right of Children to Free and Compulsory Education (RTE) Act, 2009 and the National Education Policy (NEP) 2020 have specified that the teachers must be professionally trained and pedagogically competent, in order to ensure enhancement of educational quality. Based on the norms of NCTE, the qualification of Higher Secondary (10+2), Diploma of elementary education (D.El.Ed), qualification in teacher eligibility test (TET) is required for the pedagogical preparedness and professional competence for elementary teachers (Government of India, 2020).

Although these are policy measures, the problem of professionally inadequately trained teachers still persists in some parts of India. National education data demonstrates that there are significant regional differences with regard to teacher qualifications, deployment and teacher education institutions. The disproportionate distribution of trained teachers, inadequate infrastructure, and irregular recruitment processes remain the challenges in ensuring quality elementary education, especially in geographically isolated and socio-economically vulnerable areas (UNESCO, 2024). The State of Education Report India: No Teacher, No Class also revealed that teacher shortages and the absence of teachers in classrooms continue to be a serious problem across India which impacts the quality of education and effectiveness of classroom instruction (UNESCO, 2021).

The issues are especially significant in Manipur, a state with a rich geographical variation, both in terms of education infrastructure and institutional access between the hill and valley regions. There are nine District Institutes of Education and Training (DIETs) in Manipur with five located in the hill areas (Chandel, Churachandpur, Senapati, Tamenglong and Ukhrul) and four in the valley areas (Imphal East, Imphal West, Kakching and Bishnupur). Besides, there are two institutions in Imphal East and Imphal West that provide Diploma in Elementary Education (D.El.Ed.) course, too.

Although the number of educational and teacher education institutions in the state has been increasing, it is still difficult to find professionally trained teachers. Singh and Kashung (2022) in their study on school and teacher education in hill districts of Manipur found that though the educational and teacher education institutions have been gradually expanded in the hill districts but the deficiency of professionally trained teachers is still a serious issue affecting the quality and effectiveness of the elementary education. They conclude that the provision of teacher education infrastructure may be quite inadequate to achieve equitable teacher quality if there is no effective implementation of recruitment and deployment policy.

The situation has turned worse since 2016 as there was no significant recruitment of teachers in the government schools of Manipur, leading to a huge amount of government teacher posts being left vacant

in various districts. Teacher shortages, and reliance on unqualified teachers, are significant issues in teacher preparation, educational equity, and institutional effectiveness in elementary school. The challenges have significance on the implementation of teacher qualification norms and on the aims of educational improvement set forth in the National Education Policy 2020.

Though some studies at the national and international level have explored teacher quality, teacher education and regional educational gaps, there is a lack of systematic empirical analysis of the distribution of trained and untrained teachers across the districts, difference between hill and valley regions and the trend of trained teachers from one year to another based on the recent data from UDISE+ in the context of the State of Manipur. Moreover, research on the use of a Teacher Quality Index (TQI) approach to understanding the differences in teacher quality in elementary education is still limited, especially in North-East India. Thus, the present study tries to fill this gap by analyzing the district-wise distribution, regional disparities and trend of trained and untrained teachers in elementary schools of Manipur for the period 2020-21 to 2024-25 based on Unified District Information System for Education Plus (UDISE+) data.Objectives of the Study

The present study was undertaken with the following objectives:

1. To examine the district-wise distribution of trained and untrained teachers in elementary schools of Manipur during 2020–21 to 2024–25.
2. To compare the proportion of trained and untrained teachers between hill and valley districts of Manipur.
3. To analyse the trend in teacher qualification status in elementary schools of Manipur during 2020–21 to 2024–25.
4. To examine inter-district disparities in the Teacher Quality Index (TQI) of elementary teachers in Manipur.

Methodology

This study deployed descriptive and analytical research design, which used secondary data analysis. The study explores the distribution of trained and untrained teachers in elementary schools of Manipur at district level, regional variations and trend of trained and untrained teachers in elementary schools in Manipur between 2020-21 and 2024-25.

This study used secondary data from Unified District Information System for Education Plus (UDISE+) reports on education by the Ministry of Education, Government of India. Five years of data (2020-21 to 2024-25) for the trained and untrained teachers in elementary schools in the District of Manipur were collected and analysed. The data on teacher education institutions, teacher qualification norms and educational policies were collected from the National Education Policy (NEP) 2020, National Council for Teacher Education (NCTE) policy regulations and teaching education related literature.

The study was conducted in all sixteen districts of Manipur, both the hill and valley districts. For comparative analysis the districts were categorized based on geographical classification of the Government of Manipur.

Major variables that were taken into account in the study were number of trained teachers, number of untrained teachers, total number of teachers, percentage of trained teachers, percentage of untrained teachers and Teacher Quality Index (TQI). The Teacher Quality Index was derived from the percentage of trained teachers to the total number of teachers. Teacher Quality Index has been used as one of the quantitative indicators to measure the quality and professional competence of teachers in educational

research (Stronge & Hindman, 2006; Chao et al., 2007). The TQI was used in the current study as a qualification-based indicator that is the percentage of professionally trained teachers in the elementary teaching force. Data Analysis and Interpretation was carried out using Frequency Distribution, Percentage Analysis, Trend Analysis, Comparative Analysis and Ranking Analysis for Districts.

The present research is conceptually oriented on Human Capital Theory and perspective of Professionalization of Teaching. Human Capital Theory puts the focus on the importance of education and training as an investment creating individual and institutional effectiveness (Schultz, 1961; Becker, 1964). Professionally trained teachers make their mark in terms of the quality of their teaching and its impact on student learning in the elementary school context. From the Professionalization of Teaching perspective, teaching is also a specialized profession that requires formal qualification, pedagogical training and pedagogical competence (Darling-Hammond et al., 2020). In view of this, the present study used the Teacher Quality Index (TQI) as a qualitative indicator and analyze the teacher quality status of the districts and between the hill and valley areas of Manipur based on the qualification of teachers.

Results and Findings

This section shows analysis of different distribution of trained and untrained teachers employed in Manipur elementary schools by district during 2020–21 to 2024–25. Secondary data from the Unified District Information System for Education Plus (UDISE+) are used for the analysis. The results indicate differences in the distribution of professionally trained and untrained teachers by district and suggest regional differences in the qualifications of elementary teachers. Results are presented in tables, graphically and then interpreted and analysed.

Objective 1

To examine the district-wise distribution of trained and untrained teachers in elementary schools of Manipur during 2020–21 to 2024–25.

The number of trained teachers in elementary schools of the district wise distribution in the year 2020–21 to 2024–25 has been shown in Table 1. The analysis suggests that there is some noticeably varying inter-district type of teachers trained in the state.

In all districts, Imphal West had the maximum number of trained teachers during the study period, but the numbers decreased slightly over the years from 1,780 in 2020-21 to 1,661 in 2024-25. Likewise, Imphal East and Thoubal had relatively high numbers of trained teachers, whereas the other valley districts had relatively few schools and teachers. The number of trained teachers in the district of Churachandpur has increased from 1241 in 2020-21 to 1365 in 2024-25, showing an improvement in teacher professional qualification in the district.

Other districts with relatively high numbers of trained teachers during the study period included Kangpokpi, Senapati and Tamenglong. Jiribam, Pherzawl, Kamjong and Noney on the other hand always had lower figures of trained teachers as the schools and teaching staff are comparatively fewer in these districts.

The results indicate that while some districts showed some improvement over time in the representation of trained teachers, significant differences remained in the distribution of professionally qualified teachers across districts. The imbalance indicates that teacher education programs, teacher recruitment policies and teacher development programs need to be strengthened to ensure access to qualified teachers in all regions of the state in an equitable way.

Table 1: District-wise Number of Trained Teachers in Elementary Schools of Manipur (2020 to 2024)

District	2020–21	2021–22	2022–23	2023–24	2024–25
Bishnupur	908	863	791	783	780
Chandel	633	628	563	527	547
Churachandpur	1241	1230	1303	1291	1365
Imphal East	1500	1413	1383	1437	1536
Imphal West	1780	1697	1680	1654	1661
Jiribam	249	220	221	212	220
Kakching	501	483	472	456	440
Kamjong	287	277	307	314	285
Kangpokpi	1218	1174	1162	1153	1094
Noney	258	249	261	270	293
Pherzawl	210	197	205	201	217
Senapati	956	971	1005	987	967
Tamenglong	806	747	739	701	715
Tengnoupal	431	351	300	299	319
Thoubal	1612	1449	1273	1293	1281
Ukhrul	739	695	667	643	651

Source: UDISE+ Database on Teachers at Elementary Level (2020–21 to 2024–25)

The distribution of untrained teachers of elementary schools in the district of Manipur during the study period is shown in table 2. The results show that there was a significant proportion of teachers in various districts who did not get professional training during the past five years.

However, the number of untrained teachers was consistently high in Imphal West, varying from 2,887 (2020-21) to 2,717 (2024-25) throughout the time period among all districts. The number of untrained teachers was also much higher in Imphal East during the study period. The high number of untrained teachers in these districts could be explained by the increased number of schools and teachers in the valley area.

Likewise, there were relatively more untrained teachers in Churachandpur and Kangpokpi in every five years. The proportion of untrained teachers in Churachandpur, also known as Churachand Nagari, continued to be high with a slight upward trend from 1,763 teachers in 2020-21 to 1,701 in 2024-25. This means that there continues to be a significant number of teachers who are not professionally qualified in the district.

In contrast, districts like Jiribam, Kamjong, Pherzawl and Noney had relatively small numbers of untrained teachers during the study period. But this should not be interpreted to mean that they are better qualified teachers, because these districts also have fewer schools and teachers.

Table 2: District-wise Number of Untrained Teachers in Elementary Schools of Manipur (2020 to 2024)

District	2020–21	2021–22	2022–23	2023–24	2024–25
Bishnupur	1264	1081	988	1017	1069

Chandel	524	485	414	392	389
Churachandpur	1763	1726	1574	1654	1701
Imphal East	2361	2063	2034	2210	2177
Imphal West	2887	2576	2392	2541	2717
Jiribam	224	208	217	212	220
Kakching	674	541	510	504	535
Kamjong	279	242	255	218	199
Kangpokpi	1603	1468	1425	1397	1375
Noney	458	445	424	362	350
Pherzawl	358	346	299	289	300
Senapati	1031	974	918	932	960
Tamenglong	513	489	465	461	437
Tengnoupal	437	386	405	404	376
Thoubal	1454	1113	758	769	884
Ukhrul	731	669	627	682	718

Source: UDISE+ Database on Teachers at Elementary Level (2020–21 to 2024–25)

Objective 2

To compare the proportion of trained and untrained teachers between hill and valley districts of Manipur.

The comparative distribution of trained and untrained teachers in hill districts of Manipur from 2020-21 to 2024-25 is given in Table 3. The results show that the total number of trained teachers remained more or less unchanged over the study period, but the percentages of trained teachers progressively increased from 47.6% in 2020–21 to 50.9% in 2024–25.

It is observed that the number of untrained teachers in hill districts has decreased from 7,173 in 2020-21 to 5,936 in 2024-25, showing a moderate improvement in terms of teacher qualification status in the region. Simultaneously, the percentage of trained teachers crossed the 50% mark from 2022–23 onwards, suggesting moderate progress in teacher professionalization.

This is likely to contribute to the improvement that was seen in the hill districts, where the teacher recruitment and qualification norms are more tightly controlled than in government schools. The substantial proportion of inexperienced teachers, however, indicates the need to improve teacher education institutions, provide more professional training and ensure that qualified teachers are readily available in remote and difficult to reach areas.

Table 3: Hill Districts Total Trained and Untrained Elementary Teachers in Manipur (2020 to 2024)

Year	Trained Teachers	Untrained Teachers	Total Teachers	% Trained
2020–21	6521	7173	13694	47.6
2021–22	6142	6501	12643	48.6
2022–23	6122	6051	12173	50.3
2023–24	6080	5950	12030	50.5
2024–25	6148	5936	12084	50.9

Source: Calculated from UDISE+ district-wise data (2020–21 to 2024–25)

The comparison of trained and untrained teachers in the valley districts of Manipur is shown in Table 4 from the year 2020-21 to 2024-25. The results show that throughout the study period, the number of untrained teachers in the valley districts was consistently much higher than the number of trained teachers. The number of trained teachers in valley districts was still higher than that in hill districts, but the percentage of trained teachers was still small. The percentage of trained teachers increased marginally from 42.0% in 2020–21 to 44.8% in 2022–23, but declined again to 42.3% in 2024–25. On the other hand, in the five years for which data were available, the number of teachers who were not trained were still more than half of the number of teachers in the valley districts in the elementary level.

The higher percentage of untrained teachers in the valley districts could be explained based on the greater growth of schools, especially in private schools and the higher population density of teachers in urbanised districts like Imphal East, Imphal West, Thoubal and Bishnupur. The results suggest that even with improved education facilities and institutional concentration, valley districts are still struggling to provide a professionally qualified teaching force.

Table 4: Valley Districts Total Trained and Untrained Elementary Teachers in Manipur (2020 to 2024)

Year	Trained Teachers	Untrained Teachers	Total Teachers	% Trained
2020–21	6808	9388	16196	42.0
2021–22	6502	8311	14813	43.9
2022–23	6210	7654	13864	44.8
2023–24	6141	8094	14235	43.1
2024–25	6223	8471	14694	42.3

Source: Calculated from UDISE+ district-wise data (2020–21 to 2024–25)

Objective 3

To analyse the trend in teacher qualification status in elementary schools of Manipur during 2020–21 to 2024–25.

Table 5 shows the percentage distribution of trained and untrained teachers in the Elementary Schools of Manipur during 2020-21 to 2024-25. The analysis shows that there was moderate improvement in the proportion of trained teachers over the study period, but untrained teachers remained a larger proportion of the teaching workforce over the 5 years of the study period.

In 2020-21, 44.59% of the total elementary teaching workforce was trained teachers while 55.41% was untrained teachers. The percentage of trained teachers slowly rose and stood at 47.36% for 2022-23, reflecting the enhancement in the professional qualifications of teachers. However, there was a slight downward trend after that, with the percentage dropping slightly to 46.20% in 2024–25.

Correspondingly, the percentage of untrained teachers declined from 55.41% in 2020–21 to 52.64% in 2022–23, but increased again to 53.80% in 2024–25. This variation indicates that while there was improvement in the quality of teachers, it was not uniform and steady over the study period.

One of the important outcomes of the study is that trained teachers remained less in number than the untrained ones during the five years. This reflects that teacher professional qualification is still a huge challenge in elementary education in Manipur. The proportion of teachers who were not trained is very high, which worries about the quality of classroom teaching, teaching effectiveness, and the execution of the quality education program.

The results also bring to the fore the need to build and strengthen teacher education institutions, increase access to teacher professional development programmes and make a robust implementation of the teacher qualification standards prescribed by the National Council for Teacher Education (NCTE). The present findings, especially in the light of the National Education Policy (NEP) 2020 that put the emphasis on having professionally qualified teachers as the basis of quality education in schools, indicates that there is still a long way to go in the state in this regard.

Table 5: Percentage of Trained and Untrained Teachers in Elementary Schools of Manipur (2020 to 2024)

Year	Trained Teachers	Untrained Teachers	Total Teachers	% of Trained Teachers	% of Untrained Teachers
2020–21	13329	16561	29890	44.59	55.41
2021–22	12644	14812	27456	46.05	53.95
2022–23	12332	13705	26037	47.36	52.64
2023–24	12221	14044	26265	46.53	53.47
2024–25	12371	14407	26778	46.20	53.80

Source: Calculated from UDISE+ district-wise data on trained and untrained teachers in elementary schools of Manipur (2020–21 to 2024–25).

Objective 4

To examine inter-district disparities in the Teacher Quality Index (TQI) of elementary teachers in Manipur.

Table 6 shows the districts in Manipur where the highest percentage of trained and untrained teachers are working in the Elementary Schools for the five-year period from 2020-21 to 2024-25. The results show significant variations in the teacher qualifications status between the different districts in the State.

In all the districts, Tamenglong consistently had the highest percentage of trained teachers ranging from 60.4% to 62.1% in all the years of the study. Thoubal had the highest Teacher Quality Index (62.7%) in 2022–23 and 2023–24, which means that comparatively better percentage of professional qualification status was found among the elementary teachers of Thoubal compared to other schools of the district.

On the contrary, there was a higher percentage of untrained teachers in Imphal West in all the study years. The proportion of untrained teachers in the district never dropped below 58% in all five years and stood at 62.1% in 2024–25. This suggests that even in an educationally well-developed and urbanised district of Manipur like Imphal West, a significant number of elementary teachers were educationally unqualified.

The results indicate that geographical remoteness and infrastructural challenges are not the only factors linked to teacher qualification differences in Manipur. Instead, the findings suggest that districts in higher-density school clusters, such as those with more private educational institutions, may also have a greater percentage of untrained teachers, because of flexible hiring requirements and lax regulation of professional qualification standards.

The relatively high TQI in districts like Tamenglong and Thoubal could be linked with higher reliance on government managed schools and relatively disciplined teacher recruitment mechanisms. However, in other districts like Imphal West, the dominance of untrained teachers shows that the challenge of having trained teachers in all types of schools remains.

Table 6: Districts with the Highest Percentage of Trained and Untrained Teachers in Manipur (2020–21 to 2024–25)

Year	District with Highest % of Trained Teachers	% Trained	District with Highest % of Untrained Teachers	% Untrained
2020–21	Tamenglong	61.1	Imphal West	61.9
2021–22	Tamenglong	60.4	Imphal West	60.3
2022–23	Thoubal	62.7	Imphal West	58.7
2023–24	Thoubal	62.7	Imphal West	60.6
2024–25	Tamenglong	62.1	Imphal West	62.1

Source: Calculated from district-wise Teacher Quality Index (TQI) data based on UDISE+ statistics (2020–21 to 2024–25).

Discussion

The present study focused on the trained and untrained teachers at elementary schools in the district, regional difference and trend of trained teachers in Manipur during 2020-21 to 2024-25 based on UDISE+ data. The results show that over the years there has been a moderate increase in the percentage of professionally trained teachers, but the untrained teachers still made up a significant portion of the elementary school teaching force during the study period. This is in line with the observations of UNESCO (2024) which stated that the shortage of teachers and reliance on unqualified teaching staff are still significant challenges to attain quality education, especially in remote and remote and rural areas.

The study also highlighted that there was huge disparity between districts in terms of teacher qualification status in Manipur. The Teacher Quality Index (TQI) value was comparatively higher in districts like Tamenglong and Thoubal while higher percentage of untrained teachers were found in districts like Imphal West. The results suggest that geographical remoteness is not the only factor in explaining differences in teacher qualification. Districts with a higher density of schools and teachers, especially private schools, may, however, also have a higher percentage of untrained teachers because of the flexibility in hiring teachers and lax application of the professional qualification norms. This was consistent with the study on teacher professional qualifications in India by Mehta (2023), who found a significant variation in the availability of trained teachers across different regions in India at the state and district levels.

Comprehensive differences were also noted between hill and valley districts, regarding the teacher qualification status. The percentage of trained teachers slightly improved over the study period in hill districts and passed the 50 per cent threshold in 2022-23. This finding partially corroborates Singh and Kashung (2022) who reported an increasing trend of teacher education institutions and educational infrastructure in the hill tracts of Manipur. Yet, despite these gains, the continued presence of a significant number of untrained teachers suggests that increased teacher education might not be enough to provide equitable teacher quality, if there are no effective recruitment and deployment policies in place.

The results of the current research also confirm the assumptions of the Human Capital Theory as well as the perspective of the Professionalization of teaching, that defines the professional training and qualification as an integral part of educational quality and effectiveness of the institution. Professionally trained teachers are a vital source of educational human capital that are qualified pedagogically and professionally to effectively educate students in the classroom (Becker, 1964; Darling-Hammond et al., 2020). The persistent phenomenon of underqualified teachers in the study thus poses significant concerns about teaching quality and the realisation of the vision of the National Education Policy (NEP) 2020.

In all, the study calls for strengthening of teacher education institutions, increasing the professional training of teachers, regular recruitment of teachers, and better implementation of the norms of NCTE qualification in order to enhance the quality of teachers in the elementary schools of Manipur.

Conclusion

The study revealed significant inter-district variation as well as discrepancy between the hilly and valley areas in the qualification status of the elementary teachers in Manipur. While the percentage of professionally trained teachers increased modestly over the five years, the number of untrained teachers remained large at the elementary level. The Teacher Quality Index (TQI) values were comparatively high in districts like Tamenglong and Thoubal on the contrary a higher percentage of teachers were untrained in districts like Imphal West. The results also indicate that the persistence of untrained teachers is partly related to inadequate recruitment of teachers and the dissimilarity in the distribution of competent teachers and the weak enforcement of norms on teacher qualifications. Considering that untrained teachers predominantly teach in elementary grades, it is crucial to address concerns regarding instructional quality and educational equity. The study, therefore, emphasizes on the need to improve the quality of teacher education institutions, increase teacher professional training, regular teacher recruitment and more effective implementation of NCTE qualification norms in all the districts of Manipur.

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