Teacher Characteristics of Public and Private Schools in Nepal

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Abstract

This study attempts to examine the contribution of three different teacher characteristics - mean age of teachers, mean years of experience, and mean of qualification levels on student's learning achievement. The purpose of this study was to examine the contribution of key teacher characteristics that contribute to quality education. For this, data from a number of sources, particularly secondary sources were employed covering both public and private schools in Nepal. Quantitative approach was adopted to support the analysis conducted using documents review. Results of the analyses paper strongly suggest that teacher qualification, age of teachers and experiences are the key contributing factors for providing quality education in Nepal. There seems to be a positive relationship between the level of qualification of the teacher and student learning achievement. The main policy implication of the study is that the government should encourage the recruitment of young and highly qualified teachers in order to improve student learning achievement.

Key words

Teacher characteristics, Qualification, Learning achievement, Professional experience, Retirement

Background

Teachers have been critical to any reforms designed to improve quality education in the developing countries like Nepal. It is now widely accepted that student learning outcomes depend on a number of factors like school environment, teacher's competencies, pedagogical processes and other pertinent variables. In this regard, teachers' characteristics constitute the most important set of those variables for providing quality education (National Center for Educational Development, 2009). This could be the reason that several countries in the world invest a significant amount of money in teacher related input (UNESCO, 2004). Quality of teaching has therefore been one of the most consistent features of successful schools. Grieves and Hanafin (2005) believe that teachers are the original knowledge workers whose value lie directly in their level of qualification and experience. Differences in teacher qualities in urban and rural areas have significantly contributed to children's learning achievements (Niu, 2009). These evidences strongly support one of the findings of the study carried out in Nepal, which found that 40 to 90 per cent of the difference in student test scores was attributed to teacher quality (CERID, 2008).

During the 90s, a number of large-scale reforms, like radio education, distance training, resource center/cluster-based training were implemented for teacher professional development in Nepal. Majority of the training programs could not produce desired results because of the

low qualification of school teachers (MOE, 1999). Very interestingly, the teachers, who had higher level of qualification, performed better compared to trained teachers (MOE, 1997). This is mainly because of the higher level of understanding among school teachers with higher qualification. Several government documents point out the reasons that a number of factors responsible at operational level for poor educational quality are chiefly poorly motivated and novice teachers (Nepal Development Forum, 2009).

Statement of the Problem

Retention of trained teachers as well as quality teachers, in terms of their qualification and experience, has remained a critical issue in public education system in Nepal. Research into what type of teacher characteristics contributes to student achievement has been found scarce and have also produced varied results. The study is therefore an attempt to have a close look into the three different indicators of teacher characteristics and to come up with strategic options to address the problems related to teacher characteristics in public and private schools of Nepal.

Objectives of the Study

This study attempted to examine the contribution of the three different teacher characteristics - mean age of teachers, mean years of experience, and mean of qualification levels on student's learning achievement. The objectives of the study were as follow:

1. To examine the teachers' mean age, their years of experience and levels of qualifications that contribute to student learning achievements
2. To compare the effects made by, and contributions of, teacher characteristics to student learning achievements
3. To explore and suggest the possible alternatives to policy making processes

Literature Review

Evidence from research studies, in one hand, suggests that the main input of an effective school is the quality of teacher followed by the physical facilities and availability of educational materials (Farrell and Heyneman, 1989). On the other hand, teacher quality is seen as the most prominent factor for a successful school. These two findings are exactly matched with the Nepali context in which the issue of teacher characteristics has been raised for this study. Government's policy documents, for example, a master plan indicates that the low efficiency in public schools such as low student achievement, high repetition and dropout rates is the cause of the domination of novice teachers and their low time-on-task (MOE, 1997).

Similar finding also captured by Evers *et al.* (2011) that teachers' shortages reinforce the risk that under-qualified teachers are given more responsibilities, possibly more than they can deal with, which is assumed to cause a low student performance. This could be one of the reasons that the issue of teacher characteristics has been remained as a prioritized sector on the political agenda in many countries (Kuiper, *et al.*, 2008).

In order for addressing the issue related to teacher characteristics, assessing the performance gaps between experienced and novice teachers, and differences between level of their qualifications,

and identifying strategies how it can be achieved to enhance the required competencies are crucial (Reusser *et al*., 2007). Studies, for example, Gross and Dearmond (2010) identified that the teachers' qualification has contributed to greater student achievement. On the other hand, Nir and Naphcha (2007) found that teachers in their early ages quit their job and the propensity to stay in the teaching profession was significantly low. NCED (2009) therefore highlights the issues of retaining qualified teachers in the school systems to fill classrooms with experienced teachers.

Reusser *et al.* (2007) study found that the experienced teachers in the USA demonstrated a positive impact on P-12 student learning achievements compared to the novice teachers. In contrast, novice teachers found more regular in teaching in case of Nepal (Full Bright Consultancy Private Limited, 2011). The study carried out by CERID (2007) has reiterated that there is a crucial link between student retention and teacher characteristics. It is also evident from the Nigerian case that schools where teachers had been higher level of qualifications and experiences, teaching and learning have significantly improved their achievements (Akinola, 2009).

It is blamed that the public policy and provision of Nepali education systems, which has been assumed that the focus at the institutional level, would automatically lead to an improved performance in teaching and learning (Research Centre for Educational Innovation and Development, 2007). This research further claims that several reform processes were failed in Nepal due to the reform measures taken in the past that were placed very little attention on the issues related to the class room functioning. This could be the reason that the availability of organizational facilities contributes positively to the amount of teacher professional development and eventually student learning outcomes (Evers *et al*., 2011).

To arrive at the conclusion, it is evident from the findings of the literature review that there are several teacher characteristics that contribute to student learning. Of them, it is noteworthy to mention Grieves and Hanafin's (2005) research findings, which claim that experienced and qualified teachers in schools firmly represent best practice. They further identified that there are several cases of student's low performance due to the novice teachers who have fewer or no experience in teaching. The study conducted by the Full Bright Consultancy Private Limited (2011) revealed that the teachers felt their present qualifications being inadequate to have good command to teach core subjects.

Methodology

The entitled research has tried to examine the extent to which the teacher characteristics contribute to student learning both in public and private schools in Nepal. Basically, the research rests on secondary sources and the document review methods was adopted for generating necessary information on teacher characteristics and their association with student's learning achievement. The reason for adopting document review technique is not only viewing with its authenticity, stability, richness and rewarding resources (Yin, 1994). In addition, quantitative approach was also adopted to support the analysis conducted using document reviews.

A purposive sampling procedure was adopted by representing different ecological belts and all types of schools from primary through secondary representing from public and private schools. To analyze the stories of teacher characteristics in public and private schools in Nepal, the analysis of this study comprises three components. Firstly, government policy documents including Master Plan, Five-year Development Plan and Annual Strategic Implementation Plan were extensively covered. The second component of the analysis was focused on the best practices that have been occurred in both public and private schools. And finally, relevant research articles were widely used in order for collecting evidence to back up the teacher characteristics that have contributed to student learning in case of Nepal.

Discussions and Results

In recent years, there has been a growing emphasis on the importance of teacher characteristics in contributing child's learning. Teachers take an active part in the process of changing and improving educational systems. A large number of studies have been conducted on teacher characteristics including age; experiences; professional competencies so on and so forth (e.g. see Grieves and Hanafin, 2005). Among them, teachers' age is rated as the significant factor to motivate teachers in their professional competencies. Table 1, 2, and 3 demonstrate the age of teachers in the sample districts.

Table 1: Age of Teachers at Primary Level

S. No.	District	Mean Age	< 30	30-50	>50	Total
1	Bajura	42	46	515	91	652
2	Dailekh	40	164	971	126	1261
3	Darchula	42	56	733	150	940
4	Dolakha	42	115	930	229	1274
5	Doti	40	123	680	142	945
6	Jajarkot	42	234	365	337	936
7	Kavre	45	83	1537	457	2077
8	Morang	43	188	2041	456	2685
9	Mustang	40	11	163	38	212
10	Okhaldhunga	42	93	906	163	1161
11	Palpa	39	404	1233	289	1926
12	Parbat	44	98	847	282	1227
13	Rasuwa	41	29	301	33	363
14	Sarlahi	41	308	974	341	1623
15	Taplejung	42	182	798	160	1140
Overall Mean and Percentage		42	18%	70%	12%	18422

Source: Department of Education (2013)
*Note: *Maximum Age 59 and Minimum Age 20*

Table 1 shows that majority of teachers at primary level fall under the age range of 30-50 year. Among the sample districts, the data indicates that less than 20 % of teachers, on an average, are below 30 years of age, whereas; over 80% of primary school teachers are over 30 year's of age.

Table 2: Age of Teachers at Lower Secondary Level

S. No.	District	Mean Age	< 30	30-50	>50	Total
1	Bajura	40	31	87	53	171
2	Dailekh	35	74	216	19	309
3	Darchula	40	30	149	37	216
4	Dolakha	36	51	154	39	245
5	Doti	42	33	150	55	238
6	Jajarkot	41	30	102	85	217
7	Kavre	45	65	281	115	461
8	Morang	40	143	480	128	750
9	Mustang	38	11	32	8	50
10	Okhaldhunga	39	62	182	21	265
11	Palpa	36	177	299	78	554
12	Parbat	41	66	222	124	412
13	Rasuwa	39	13	41	17	71
14	Sarlahi	41	49	201	102	353
15	Taplejung	40	65	327	111	503
Overall Mean and Percentage		40	19%	60%	21%	4815

Source: Department of Education (2013)

The descriptive statistics shown in Table 2 represents the age of teachers at lower secondary level in the sample districts. Quite interesting result appears while comparing with the age of primary level teachers and the secondary level ones. There are a significant number of old teachers at lower secondary level in Jajarkot district compared to other sample districts. As in the case of primary level, Table 2 indicates that majority of teachers in the sample districts at the lower secondary level fall under the age range of 30-50 year.

Table 3: Age of Teachers at Secondary Level

S. No.	District	Mean Age	< 30	30-50	>50	Total
1	Bajura	40	20	56	36	112
2	Dailekh	39	54	156	13	223
3	Darchula	41	22	107	26	155
4	Dolakha	38	51	154	39	245
5	Doti	42	25	112	41	177
6	Jajarkot	44	17	55	46	118
7	Kavre	43	64	280	115	459
8	Morang	42	67	298	149	514
9	Mustang	43	6	25	8	40
10	Okhaldhunga	40	47	139	18	205
11	Palpa	40	134	214	71	420
12	Parbat	41	62	208	116	385
13	Rasuwa	43	10	33	14	57
14	Sarlahi	44	27	166	51	244

15	Taplejung	42	29	112	40	181
Overall Mean and Percentage		**41**	**18%**	**60%**	**22%**	**3535**

Source: Department of Education (2013)

The descriptive statistics shown in Table 3 represents the age of teachers at secondary level in the sample districts. There is significant number of old teachers at lower secondary level in Jajarkot district compared to other sample districts. As in the case of primary level, Table 3 indicates that majority of teachers in the sample districts at the secondary level fall under the age range of 30-50 year.

The overall descriptive statistics shown in Table 1, 2, and 3 indicate that mostly teachers' age fall around the range of forty. While comparing district wise data, it still remains an open question as to which factor that motivates the young teachers, and those who can be retained in the systems. NASA (2013) found that the schools with teachers aged less than 32 years had the highest achievement while the schools with teachers more than 48 years had significantly lower results (MOE, 2013).

Table 4: Professional Experience of Teachers at Primary Level

S. No.	District	Mean Year	< 10	10-20	>20	Total
1	Bajura	14	176	274	202	652
2	Dailekh	06	744	340	177	1261
3	Darchula	17	771	141	28	940
4	Dolakha	09	573	229	471	1274
5	Doti	09	510	198	236	945
6	Jajarkot	13	730	168	37	936
7	Kavre	18	1786	249	42	2077
8	Morang	16	2175	403	107	2685
9	Mustang	07	100	34	78	212
10	Okhaldhunga	13	615	279	267	1161
11	Palpa	11	520	828	578	1926
12	Parbat	19	736	368	123	1227
13	Rasuwa	13	254	80	29	363
14	Sarlahi	15	958	471	195	1623
15	Taplejung	14	308	467	365	1140
Overall Mean and Percentage		**13**	**59%**	**25%**	**16%**	**18422**

Source: Department of Education (2013)
*Note: *Maximum Years of Experience 34 and Minimum Years of Experience 2*

The descriptive statistics shown in Table 4 indicates that the mean year of professional experience of teachers is 13 years at primary level. However, almost two-third of teachers fall under less than 10 years experience. Mustang and Dolakha districts possess more experienced teachers at primary level compared to other sampled districts.

Table 5: Professional Experience of Teachers at Lower Secondary Level

S. No.	District	Mean Year	< 10	10-20	>20	Total
1	Bajura	09	135	29	7	171
2	Dailekh	15	266	37	6	309
3	Darchula	08	114	48	54	216
4	Dolakha	12	172	54	20	245
5	Doti	13	126	50	62	238
6	Jajarkot	13	167	35	15	217
7	Kavre	08	124	194	143	461
8	Morang	14	488	113	150	750
9	Mustang	08	14	22	15	50
10	Okhaldhunga	07	159	80	27	265
11	Palpa	12	399	100	55	554
12	Parbat	16	185	74	152	412
13	Rasuwa	07	41	9	21	71
14	Sarlahi	08	155	42	155	353
15	Taplejung	09	297	136	70	503
Overall Mean and Percentage		**11**	**59%**	**21%**	**20%**	**4815**

Source: Department of Education (2013)

Table 5 in relation to the teaching experience of teachers at lower secondary level indicates that Parbat and Sarlahi districts have more experienced teachers compared to other sampled districts. The overall mean of the years of experience of all the teachers in the sample districts indicates that the level of professional experience of teachers appears about 11 years.

Table 6: Professional Experience of Teachers at Secondary Level

S. No.	District	Mean Year	< 10	10-20	>20	Total
1	Bajura	10	88	19	4	112
2	Dailekh	07	192	27	4	223
3	Darchula	10	82	34	39	155
4	Dolakha	07	172	54	20	245
5	Doti	09	94	37	46	177
6	Jajarkot	08	91	19	8	118
7	Kavre	13	124	193	142	459
8	Morang	12	221	103	190	514
9	Mustang	07	24	9	7	40
10	Okhaldhunga	07	123	59	23	205
11	Palpa	08	302	76	42	420
12	Parbat	11	173	69	142	385
13	Rasuwa	09	33	7	17	57
14	Sarlahi	11	120	29	95	244
15	Taplejung	08	80	31	71	181
Overall Mean and Percentage		**09**	**54%**	**22%**	**24%**	**3535**

Source: Department of Education (2013)
*Note: * Maximum Years of Experience 29 and Minimum Years of Experience 1*

The descriptive statistics shown in Table 6 specifies that mostly teachers' experiences fall around the range of nine years. The figure further demonstrates the overall mean years of teaching experience of teachers which indicates that teachers in Sarlahi and Taplejung districts appear more experienced than those engaged in other districts. It is also noteworthy to mention here that the teachers in Dailekh and Bajura districts are found quite less experienced teachers compared to other districts.

Teachers' qualification is another competent factor for contributing student learning outcomes. Several studies like Full Bright Consultancy Private Limited (2011) and Akinola (2009) identified that there is a crucial link between level of teacher qualifications and teaching-learning innovations in classroom teaching. In other word, when it is considered in connection with the level of qualification, the increase in the student learning outcome is directly related to teacher qualification. Table 7, 8 and 9 display the levels of teacher qualifications in primary, lower secondary and secondary levels respectively.

Table 7: Levels of Teacher Qualification at Primary Level

S. No.	District	Master	Bachelor's	+2	SLC	Under SLC	Total
1	Bajura	2	22	360	241	27	652
2	Dailekh	24	159	614	452	12	1261
3	Darchula	43	172	324	331	70	940
4	Dolakha	34	177	496	560	7	1274
5	Doti	6	10	355	419	155	945
6	Jajarkot	11	99	371	443	12	936
7	Kavre	81	191	911	769	125	2077
8	Morang	108	402	762	1227	186	2685
9	Mustang	0	3	57	142	10	212
10	Okhaldhunga	14	168	435	541	3	1161
11	Palpa	60	380	611	798	77	1926
12	Parbat	13	74	244	895	1	1227
13	Rasuwa	4	50	160	148	1	363
14	Sarlahi	79	233	615	621	75	1623
15	Taplejung	10	168	307	605	50	1140
Overall Percentage		3	13	36	44	4	100

Source: Department of Education (2013)

The descriptive statistics shown in Table 7 reveals that mostly teachers' level of qualification fall within the required basic levels of qualification. For instance, mostly teachers at all levels possess minimum levels of qualification. However, four percent of the teachers are still found below the required qualification level. Remarkably, Morang and Palpa districts hold higher levels of teacher qualification compared to other sampled districts. These two districts' quality education profiles also appeared significantly higher than that of those other sampled districts (DOE, 2012). Notably, there are 52 per cent of teachers working at primary level who hold above the required SLC level qualification.

Table 8: Levels of Teacher Qualification at Lower Secondary Level

S. No.	District	Master	Bachelor's	+2	Total
1	Bajura	8	54	109	171
2	Dailekh	27	141	141	309
3	Darchula	30	96	90	216
4	Dolakha	26	114	105	245
5	Doti	14	118	106	238
6	Jajarkot	15	87	115	217
7	Kavre	50	126	285	461
8	Morang	30	229	491	750
9	Mustang	1	13	36	50
10	Okhaldhunga	23	112	133	268
11	Palpa	61	324	169	554
12	Parbat	17	98	297	412
13	Rasuwa	3	27	41	71
14	Sarlahi	25	110	218	353
15	Taplejung	54	205	244	503
Overall Percentage		8	38	54	100

Source: Department of Education (2013)

Table 8 shows that all teachers have basic level of qualification. For instance, mostly teachers at all levels possess minimum level of qualifications. About 50 per cent of teachers possess higher level of qualification at lower secondary level. Remarkably, as in the case of primary level, Palpa, Morang and Taplejung districts hold higher levels of teacher's qualification compared to other sampled districts.

Table 9: Levels of Teacher Qualification at Secondary Level

S. No.	District	Master	Bachelor's	Total
1	Bajura	81	31	112
2	Dailekh	149	74	223
3	Darchula	88	67	155
4	Dolakha	125	120	245
5	Doti	118	59	177
6	Jajarkot	75	43	118
7	Kavre	301	158	459

8	Morang	408	106	514
9	Mustang	33	7	40
10	Okhaldhunga	146	59	205
11	Palpa	157	263	420
12	Parbat	305	80	385
13	Rasuwa	42	15	57
14	Sarlahi	9	235	244
15	Taplejung	129	52	181
Overall Percentage		61	39	100

Source: Department of Education (2013)

Table 9 reveals that all teachers possess the required level of qualification. It is quite remarkable that more than 60 per cent of teachers have master's' degree at secondary level. As in the case of primary and lower secondary, Morang holds higher level of teacher's qualifications compared to other sampled districts. The table shows that Parbat, Kavre and Dailekh districts retain higher level of teacher qualification at secondary level.

School teachers' retirement is another interesting part of this research. Table 10 below demonstrates the scenario of teachers' retirement at all levels in all the sample districts.

Table 10: Tendency of Teachers' Retirement

S. No.	District	Less than 1 Year	2-5 years	6 - 1 0 years	11 - 20 years	More than 21 year	Total
1	Bajura	3.2%	5.0%	33.6%	18.8%	39.4%	100.0%
2	Dailekh	0.7%	2.0%	30.3%	19.7%	47.2%	100.0%
3	Darchula	2.3%	5.3%	31.0%	23.4%	38.0%	100.0%
4	Dolakha	1.2%	4.4%	33.5%	25.7%	35.2%	100.0%
5	Doti	3.00%	4.30%	29.00%	23.50%	40.20%	100.0%
6	Jajarkot	1.30%	4.30%	27.00%	21.40%	46.00%	100.0%
7	Kavre	1.9%	4.7%	47.2%	25.5%	20.7%	100.0%
8	Morang	1.00%	4.30%	31.00%	20.50%	1.00%	100.0%
9	Mustang	2.50%	3.50%	23.00%	24.00%	2.50%	100.0%
10	Okhaldhunga	2.1%	2.9%	33.8%	21.8%	39.4%	100.0%
11	Palpa	1.6%	4.5%	28.1%	19.7%	46.1%	100.0%
12	Parbat	4.0%	8.4%	32.8%	26.1%	28.6%	100.0%
13	Rasuwa	1.6%	4.5%	28.1%	19.7%	46.1%	100.0%
14	Sarlahi	4.0%	8.4%	32.8%	26.1%	28.6%	100.0%
15	Taplejung	2.6%	5.2%	29.5%	21.8%	40.9%	100.0%
Overall Percentage		**2.1%**	**4.3%**	**27.8%**	**17.8%**	**48.1%**	**100.0%**

Source: Department of Education (2013)

The descriptive statistics in Table 10 shows that almost 50 per cent of teachers leave their job after teaching 21 years or above. There are only two per cent of teachers who leave their job within two years. This result gives a clear indication that the problem of early retirement of teachers seems insignificant in case of Nepal. Yet, retaining qualified teachers has been a burning issue in Nepali schools.

Conclusion

The age range of teachers at all levels: primary, lower secondary and secondary were found to be around the range of forty. The mean year of professional experience of teachers at the primary level was found to be 13 years. The mean number was 11 years for lower secondary level teachers and 9 years for secondary level teachers. Moreover, the research shows that almost all teachers fall within the required basic level of qualification. Only four percent teachers at the primary level are still found below the required qualification. However, the level of qualification mostly exceeds the basic level in the lower secondary and secondary level.

This study found out that teachers in Morang and Palpa have high level of qualification on average. A study on student performance in SLC by Mathema and Bista (2006) found out that the districts of Morang and Palpa were among the high performing districts. Although this research has not found any conclusive evidence, there seems to be a positive relationship between the level of qualification of the teachers and student learning achievement. The main policy implication of the study is that the government should encourage the recruitment of young and highly qualified teachers in order to improve student learning achievement.

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