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Fawzia, Maliha

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Does Teacher's Educational Qualification Matter in Primary Classroom?

Maliha Fawzia[2] and Md. Rifat Ahmed
Teach for Bangladesh

It has been assumed that teacher's pay and educational qualification are two of the key factors behind a teacher's good performance in the classroom. Therefore, it is commonly believed that a highly paid and highly qualified teacher has greater chances of securing high achievement in his or her classroom than a low income teacher with less educational qualification. The aim of the research was to find out what percentage of difference can be made in the students' achievement through putting a better qualified teacher with high payment in a low income primary classroom setting. Hence, the research explores and compares between the classroom achievements of two different teachers with opposite educational qualification and pay scale. The research took place at an underprivileged primary school in Urban Dhaka. 16 third grade students of the two different teachers, equally divided by their merit position sat for an English literacy standardized test. The results are being compared between two classrooms in which, one has a highly paid teacher with high educational qualification, who teaches the class with various educational materials and additional books along with the existing government textbooks whereas, the other less privileged teacher teaches with only government curriculum textbooks in his class. The finding of the research gives an interesting aspect of how achievement in both of the classrooms differed with a substantial percentage. In addition, the research also finds the importance of a set of variables such as teacher training, student and teacher's personal motivation, teacher-student relationship and family support, behind the achievement of a student.

Keywords: *Quality education, teacher's pay, primary classroom, primary teaching High qualified teacher, underprivileged classroom, educational qualification, teacher training, standardized test, English literacy.*

Essentially, in case of evaluating student achievement, teacher quality has been considered as the most significant factor all over the world. "Among the various influences that schools and policymakers can control, teacher quality was found to account for a larger portion of the variation in student test scores than all other characteristics of a school, excluding the composition of the student body (so-called peer effects) (Goldhaber, 2002). Though selecting the right set of quality has always been contradictory, this study mainly puts emphasis on teacher's educational background, subject knowledge and trainings. Moreover, the study also tries to find out the impact of high payment in a classroom in comparison to a teacher with low incentives.

In Bangladesh, it has always been a common concern to the teachers, policy makers, government and parents that what the aspects that can actually contribute to the quality teaching in classroom along with

[2] Correspondence should be addressed to Maliha Fawzia, E-mail: maliha.fawzia@gmail.com

ensuring a higher achievement score. It has been commonly assumed that the teachers of the government primary schools are not motivated and qualified enough to give a quality classroom delivery. This research is in a quest to find out if only educational qualification and better incentive can bring a higher achievement score or it is other attributes that contributes to the overall quality of classroom teaching. Therefore, this study examines the relationship between teacher's qualification and higher incentive with the classroom achievement. This research will help the policy makers to have a deeper understanding of the current practice and potential solution through comparing the achievement of the students of two groups of students.

This study has been executed in grade three of a government primary school where the average number of students in each class is 80. The teachers are recruited as per government recruitment policy, which is HSC passed. However, the research tries to find out the importance of teacher qualification and higher salary scale, by comparing with one government primary teacher teaching the same school setting and grade level with an experimentally recruited teacher with higher educational degree and incentives. The data has been collected through a standardized test where top 15 students of both of the teachers have participated with the same exam instruction. The data of the test has allowed us to have a more concrete picture of the student achievement.

Literature Review

High qualified and high paid teacher, the term itself is very controversial with many other concepts and attributes contributing to it. This research focuses on three aspects of a qualified teacher – educational degree, subject knowledge and trainings received along with teacher payment. This section aims at connecting this study with the previous researches and philosophies.

The educational background of the teachers has been considered as one of the key factors in analysing if the students with higher qualified teacher perform better in the test. According to Buddin&Zamarro, 2009, "student-to-student deviations in achievement are about four times as large as teacher-to-teacher deviations. A typical student assigned to a teacher one standard deviation above the mean is expected to score about 5 or 6 percentage points higher in reading and math, respectively, than a comparable student assigned to an average teacher (the teacher effect size is about 0.2)." This study suggests that the achievement in reading varies from an above average teacher to an average teacher, which connects with Farguson's (1996) study, where he found that "scores on the teacher licensing test in Texas—which measures reading and writing skills as well as a limited body of professional knowledge—accounted for 20-25 percent of the variation across districts in student average test scores, controlling for teachers' experience, student-teacher ratio, and percentage of teachers with master's degrees." Moreover, in a meta-analysis it has been found that teacher's academic skills have "a positive relationship to student achievement in 50 percentf of the studies they analyzed, a much higher proportion than for teacher education or experience." (Greenwald et al. 1996)

On the contrary, there is also several researches, that clearly opposes the above idea from a very strong stance. For example, Hanushekh's (1986) research has initiated this questioning on the impact of teacher's educational qualification has no connection with the high achievement of the students. In accordance to that, Koedel and Betts (2007) also agrees that though teacher quality is an important factor for student achievement, the educational qualification and background of the teacher has little contribution to it.

Teacher training and content knowledge of the teacher also have a very strong relationship with students achievement. "Schools might improve the productivity of existing teachers, by placing somewhat greater

emphasis on content knowledge, including that which is pedagogically oriented." (Harris & Sass, 2008) Likewise Rivkin et al. (2005), finds that there is "a large differences in value-added measures of teacher effectiveness (teacher heterogeneity) but small effects of teacher qualifications like experience and education. They find that school principal rankings of teachers are better predictors of teacher performance than are observed teacher qualifications." (Rivkin & Hanushek 2005, as cited in Buddin & Zamarro, 2009) Similarly, Linda Darling Hammond (1999) mentions, "The most consistent highly significant predictor of student achievement in reading and mathematics in each year tested is the proportion of well-qualified teachers in a state: those with full certification and a major in the field they teach."

Moving forward, teacher pay is another contributing factor in higher student achievement. As Bastian (2014) mentions, "the effects of compensation reform on teacher performance and the retention of highly-effective teachers are mixed. Financial incentives can increase individuals' entry into and retention in the profession, both overall and in high-need schools, but there is much to learn about the optimal size of monetary awards and whether performance pay can encourage teachers to improve their effectiveness or result in higher-calibre individuals selecting and staying in the profession..." On the other hand, Fryer (2013) opposes the idea "Surprisingly, all estimates of the effect of teacher incentives on student achievement are negative in both elementary and middle school".

Method

The main analysis of the study has been carried out in two steps. Firstly, the data received from the comparison between the performances of the two groups of grade three students in a standardized test. This performance of the students includes both achievements and evidence of attempt in the test. Secondly, the analysis of the information regarding both of the teachers' qualifications, compensation and classroom practice collected through a semi-structured interview with both of the teachers.

The standardized test only focused on the English language literacy skills of the students. It has been designed by following the grade appropriate standards of American Common Core standards and National Curriculum of Bangladesh. Both of the groups are of same class and gender. For the purpose of the study, we have selected a group of girls consisting top 16 students from a high qualified teacher's class and another group with same specification was selected from a less qualified teacher's classroom of the same class in the same school. The test questions covered the domains of listening, reading comprehension, structured writing and creative writing. Both of the groups received same set of questions with the same instruction and time. In this study, the group of students who were taught by low qualified teacher with traditional teaching-learning method is the control group. The group with high qualified teachers with alternative teaching-learning method is considered as the experimental group. During the data analysis, the study focused on two main perspectives. First one is the difference between the average achievement of the control group and the experimental group. Second one compares the percentage of attempt taken by the students to answer the questions.

In the semi-structured interview with teacher, both of the teachers were interviewed separately. The interview mainly focused on the classroom practices, educational degrees, different trainings received during or prior to the service and their salary.(Annexure 1)

Findings

The data show that average marks of control group in listening is 4.6 and average marks of experimental group is 9.33 (Table-1). This implies that the students of the experimental group have higher exposure to English listening than the students of control group. However, only 46.6% students of Control group and

100% students of Experimental group made an attempt to answer the question (Table 2). Though a big number of the students of the high qualified teachers failed to write the spelling, they could identify the sound pattern of the words. This figure also suggests that achievement and attempt are more than double for experimental group compared to the control group. Following that path, in reading comprehension question Control group could secure an average of 3.33 marks and experimental group scored average of 6.66 marks (Table 1). But only 20% students of Control group tried to answer those questions in a situation where 84.4% students of Experimental group tried to answer (Table 2). This data indicates that the students of experimental group have a higher habit of practicing reading in a regular basis. The difference of achievement between control group and experimental group is higher in writing questions. For instance, average marks of Control group is 1.47 in structure writing and 1.13 in creative writing while Experimental group got 8.4 and 6.33 respectively. Though, 60.6% of Control group students tried to answer the structured writing questions, 86.7% did not even made an attempt to express their thought on a very familiar topic in creative writing (Table 2). The data also indicates that 40.4% students also did not attempt to answer the questions by using the clues given with the questions. This also suggests that it is not only the less writing competency of the students rather it is the lack of practice in answering structured writing questions. Interestingly only 46.6% students of experimental group made attempt to answer to the question on structured writing but 90.4% of the experimental group students attempted to answer creative writing questions (Table 2). The data of both of the group tells us the lack of competency in writing skills. Moreover, it also demonstrates the failure of the students to comprehend the instruction for answering the questions.

Table-1

Average Achievement of the Students

	control group	experimental group
Listening	4.6	9.33
Reading Comprehension	3.33	6.66
Structured writing	1.47	8.4
creative writing	1.13	6.33

Table-2

Percentage of Attempt

	control group	experimental group
Listening	46.6%	100%
Reading Comprehension	20%	84.4%
Structured writing	60.6%	90.4%
creative writing	13.3%	46.6%

In the semi structured interview, the teacher of the control group has a HSC degree whereas the teacher with the experimental group has a master's degree in social science with an almost double salary scale than the low qualified teacher. The control group teacher has received five one day long in service sub-cluster trainings arranged by the government. Though she has received several trainings on teaching learning, she is highly dependent on the text books only. The discussion revealed that she thinks memorizing the content is the best way of learning. Her content knowledge to teach English is mainly

dependent to the text books and guide books. However, she sometimes uses group work in her classroom. She also makes lesson plans often. On the contrary, the teacher of the experimental group has received extensive pre service 6 weeks long residential training on teaching learning methodologies and other techniques. The teacher also informs that she continuously take the help of internet to study the lesson content for each subject. She uses various activity based learning techniques and also encourages group work or pair work in her class regularly.

Discussions

In terms of achievement, the experimental group has achieved double in almost all of the domains of the standardized test. Then the question arises regarding the classroom practice of the experimental group. It has been identified that the teacher with higher educational qualification and trainings has regularly used different teaching learning techniques to enhance the classroom learning. As Rob Greenwald (1996) remarks, "school resources are systematically related to student achievement and that these relations are large enough to be educationally important" and "resource variables that attempt to describe the quality of teachers (teacher ability, teacher education, and teacher experience) show very strong relations with student achievement."

Interestingly, it has been identified that there has been a significant difference in terms of the attempt to answer the questions in listening and creative writing section. This implies that the students of the experimental group have higher exposure to such activities which are additional to the textbook. This shows us the tendency of textbook dependency of the control group teacher.

It has also been noticed that, along with continuous professional development opportunities, the teacher of the experimental group receives a higher amount of incentive. This also causes more motivation for the high qualified teachers to give a better effort than the teacher of the control group. "In reality, teacher salaries are not subject to the same competitive forces as most private sector salaries because most teachers are hired by the state. It is clear that teachers must be paid at least as much as they can receive in their alternative occupation, but there is no constraint on the top." (Lazear, 2001) Therefore, a high incentive also contributes as a motivating factor in teaching.

Though the achievement of the experimental group is double than the control group, there are some external factors related to such achievement. It is not only the teacher qualification and high salary. It has been identified from student data, details discussion with the teachers and classroom observation that the other variables like teacher-student relationship, student's family support and teacher's interest in the content area. Both of the teachers have separately agreed to these points that these work as key factors behind the active involvement of both the teachers and the students.

Conclusion

This research has examined that a teacher with a master's degree makes a positive difference on students' achievement compared to teachers with no advance degrees. Not only academic degree, but also effective training and salary increase the level of motivation among teachers and have a major impact on teaching-learning process. The teachers, who actually control this teaching-learning process, need effective training which comprises content knowledge and teaching methods. Content knowledge helps the teacher to plan and deliver the lesson more successfully while active teaching method is necessary for students to grasp the content fruitfully. Thus Berliner (2005) remarks, "By *successful teaching* we mean that the learner actually acquires some reasonable and acceptable level of proficiency from what the teacher is engaged in teaching."

However, though the research clearly indicates the importance of the above mentioned criteria, it still does not make the perfect list of qualities to ensure teacher qualities for consistent classroom improvement. This research has taken place in a very limited area with a small sample size. Therefore, it is still a matter of question whether or not the system provides enough opportunities and incentives to the teachers to enhance their qualities to deliver a better learning outcome.

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