



# A Study on Evaluating Teaching Effectiveness and Efficiency at Secondary Level Education of Bangladesh

**Md. Abu Aslam Parvez**

Professor (Retired)

Department of Physics

Ideal College, Dhanmondi,

Dhaka, Bangladesh

## ABSTRACT

Teaching effectiveness is mainly deals with the relationship between the dispositions of teachers, teaching acts, classroom environment, and their effect on the learning of students. It depends on the emotional (kind, warm, compassionate), cognitive (using innovative teaching techniques, mastery of subject), and behavioural competence (patience, punctual, attentive) of a teacher. However the present study has conducted to evaluate the teachers effectiveness in the secondary level of Bangladesh and to find out the problems of teachers effectiveness in the secondary level of Bangladesh. The study was conducted at Dhaka district and Kustia district in Bangladesh. The study was survey type. Purposive sampling method was used for the study. From each district 200 respondents were selected. So, total respondents were 400. Data were collected from primary and secondary sources. Primary data were collected from the respondents of the study area. Secondary data were collected from books, research reports, journals, annual reports, Website of Ministry of Education etc. The tool was prepared by keeping the objectives of the study as the framework that reflect the study variables. A pre-designed semi-structured questionnaire was developed use as data collection instrument. Prior to the interview, the purpose of data collection was explained to the respondents and verbal consent was obtained. Data were collected by face-to-face interview by the investigator. Collected data were analyzed by computer program Statistical Package for the Social Sciences (SPSS). From the result it was found that a teacher with such qualities is termed as an effective teacher. An effective teacher is the link between the educational institution and the student. He/she is able to use the teaching skills to bring out the best in a student thus increasing the school's effectiveness. Furthermore, measuring the teaching effectiveness of a teacher is also very necessary as it helps in improving the quality of teaching. The periodic feedback also helps in recognizing the gaps in teaching and in formulation of remedial plans. There are several internal and external factors that determine the effectiveness of teaching. To summarize, it may be said that teaching effectiveness is an area of research that deals with the professional and personal competence of a teacher. This paper also elaborates the factors affecting and models to measure the teaching effectiveness. Additionally, suggestions to improve the teaching effectiveness are also provided in the paper.

**Keywords:** *Teaching Effectiveness, Efficacy, Classroom, Evaluation, Assessment, Effective Teacher, Student, Teaching. Questions, Answers, Examination.*

## INTRODUCTION

Education for all and ensuring quality education continue to get persistent attention and commitment of governments across the globe. Despite the progress made through the MDG's, the progress with regard to primary, secondary and tertiary tend to vary significantly across the developing countries with a trend that shows high enrolment rate in primary, moderate growth and continuity in secondary and a very low growth in tertiary education. It has been persistent over the years. In Bangladesh the net enrolment rate in primary schools 97.7%, secondary schools 67.0% and tertiary 13.03% (Bangladesh Education Statistics, 2015). It also shows the decreasing trend in enrolment towards higher education. The Seventh Five Year Plan

(SFYP)/ SDG-4 targets achieving hundred percent net enrolment and complete free primary and secondary education by the year 2030. Education is the backbone of a nation and a prominent domain of development. In the education system, the secondary education bridges primary and tertiary education. It prepares the students for tertiary education with strong foundation of quality education and also serves many with a minimum academic attainment when entering job market. The government has undertaken a number of policy reform initiatives in recent years to accelerate the secondary education quality. These include revising the curriculum to make it more relevant to 21st century workplace skills, improving public examinations to support the development of students' higher order cognitive skills, and establishing a centralized and transparent teacher recruitment system. Therefore, secondary education may be considered as a building block for higher education and for building human resource of a country. Secondary schools are the institution that can play directly to improve quality education as to prepare the students for job market and for the next tier of education. So, secondary school performance is the issue that must be seriously looked at. Challenges to secondary school participation are greatest in sub-Saharan Africa and South Asia. Bangladesh Government has included some criteria for school subvention and also some indicators have been set up for the appraisal of secondary school performance. Despite these improvements, issues of low quality particularly pertaining to the curriculum, student assessment, and teacher performance remain as challenges to the education system. So the performance of a school can hardly be ignored or underestimated. It is an issue to examine what are the flaws from school performance perspective that cannot trigger the students for the life skill attainment and for further education or they are dropping out from tertiary education.

Given this backdrop, this study or research will make an attempt to observe the performance of four secondary schools and will try to find out any further constituents other than that conventional notion and also the reasons that influence secondary school performance. Since 1990 successive governments of Bangladesh have made concerted efforts to fulfill constitutional obligations and have undertaken "international commitments to ensure the achievement of 'education for all' goals and targets for every citizen by the year 2015" (Rahman, Hamzah, Meerah & Rahman, 2010, p. 115). Thus, various government and nongovernment initiatives have achieved significant progress regarding access to both primary, secondary education and higher education including more teachers, curriculum revision and increased enrolment rates, especially for girls in secondary education (Rahman et al., 2010). For example, net enrolment rates in primary education increased more than 10% in the decade 2005-2014 (Bangladesh Bureau of Educational Information and Statistics [BANBEIS], 2014). Not surprisingly, during 2004-2010, there was also an increase of 7% in the net enrolment rate of secondary education (BANBEIS, 2014; UNESCO, 2007). This case is also same trends in HSC.

Despite significant progress in access, equity and public examination success, poor student performance in English and mathematics in higher secondary level has become a major concern for government, education practitioners and the public in Bangladesh (Ahmed, Nath, Hossain & Kalam, 2006; Nath et al., 2007). For example, poor student performance in year eight (Junior Secondary Certificate), year ten (Secondary School Certificate) and eleven and twelve HSC public examinations has been attributed to consistently high failure rates in English and mathematics. A large body of research (e.g. Hattie, 2003; 2009) has shown that teachers are key contributors to school and college and student academic performance. Several studies (see Ahmed et al., 2006; Nath et al., 2007) have also attributed poor student performance and low-quality education to poor instructional practices of teachers as one of the main reasons in Bangladesh. Over the decades, educational effectiveness research has seen a growing interest in evaluating teachers' effects on student achievement growth (Braun, 2005; Little, Goe & Bell, 2009; Lockwood et al., 2007) and use the information to improve student performance.

Therefore, in the educational context of Bangladesh, it is critical to evaluate teacher effectiveness to improve on students' academic achievement. However, evaluating teacher effectiveness on students' achievement had been overlooked in Bangladesh and identifying teaching effectiveness has not been the subject of systematic investigation, and consequently, very little is known about teacher effectiveness on student learning in this country. Several methods have evolved for measuring teacher effectiveness (e.g., classroom teaching observations, principals' evaluations, student ratings of teacher performance, teacher self-reports, and student test scores) as new insights into effective teaching have been gained, and newer methods have endeavoured to overcome the weaknesses of preceding methods of evaluation. Recently, the increased availability of data in which student academic achievement is linked to teachers, along with

improvements in statistical methods for analyzing data, enable researchers to investigate better the value-added connections between teaching and learning (Stronge, Ward & Grant, 2011). The emergence of value-added models has enabled direct assessing of teachers' effect on student achievement, as measured by gains on standardized tests (Hershberg, Simon & Lea-Kruger, 2004; Little et al., 2009; Stronge et al., 2011). These provide improved evidence regarding the effects of the classroom teacher on students' learning that were previously extremely difficult to obtain with other measures (Goe, Bell & Little, 2008; Stronge et al., 2011)

Considering the paucity of studies and the strengths in using a value-added model to estimate the teacher effects on student learning (Braun, 2005; Murphy, 2012; Weisberg, Sexton, Mulhern & Keeling, 2009), the undertaking of further studies is important. Such investigations will provide important insights, potentially leading to improvements in the quality of education in Bangladesh. Therefore, the present study was conducted to examine the value-added impact that higher secondary level in mathematics teachers had on the students' mathematics learning. The article comprises four parts. The first presents relevant contextual information about the education system in Bangladesh, the second reviews relevant literature and explains the research question developed to guide the study. This is followed by a description and rationale for the methods employed. The last part reports and discusses the results, and outlines implications for further research and practice.

### OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

1. To evaluate the teachers effectiveness in the secondary level of Bangladesh.
2. To find out the problems of teachers effectiveness in the secondary level of Bangladesh.

### METHODOLOGY OF THE STUDY

**Study area:** The study was conducted at Dhaka district and Kustia district in Bangladesh.

**Study Design:** The study was survey type.

**Sampling method:** Purposive sampling method was used for the study.

**Sample size:** From each district 200 respondents were selected. So, total respondents of the study were 400.

**Sources of Data:** Data were collected from primary and secondary sources.

**Sources of Primary:** Primary data were collected from the respondents of the study area.

**Sources of secondary data:** Secondary data were collected from books, research reports, journals, annual reports, Website of Ministry of Education etc.

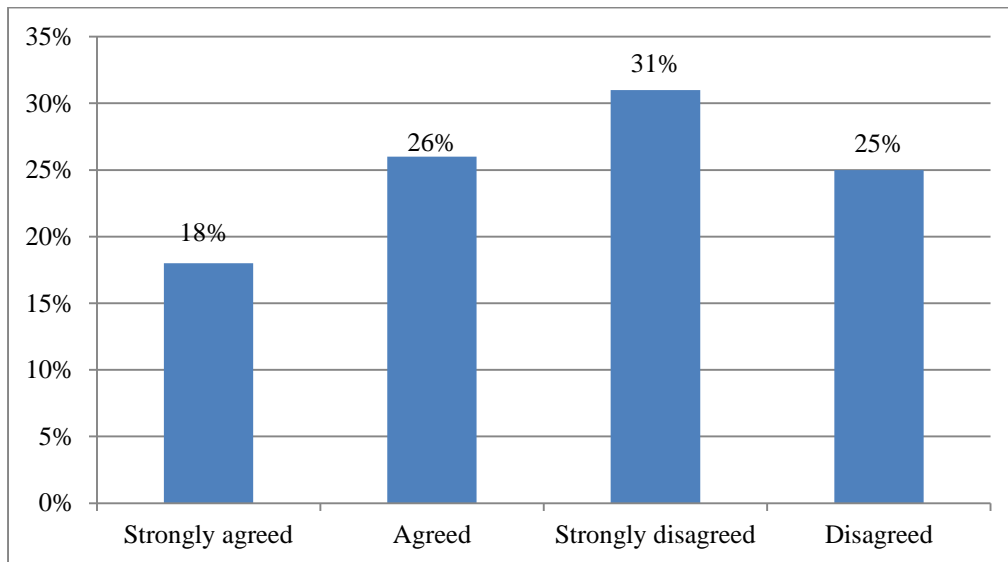
**Tool of Data Collection:** The tool was prepared by keeping the objectives of the study as the framework that reflect the study variables. A pre-designed semi-structured questionnaire was developed use as data collection instrument.

**Procedure of Data Collection:** Prior to the interview, the purpose of data collection was explained to the respondents and verbal consent was obtained. Data were collected by face-to-face interview by the investigator.

**Data Analysis:** Collected data were analyzed by computer program Statistical Package for the Social Sciences (SPSS).

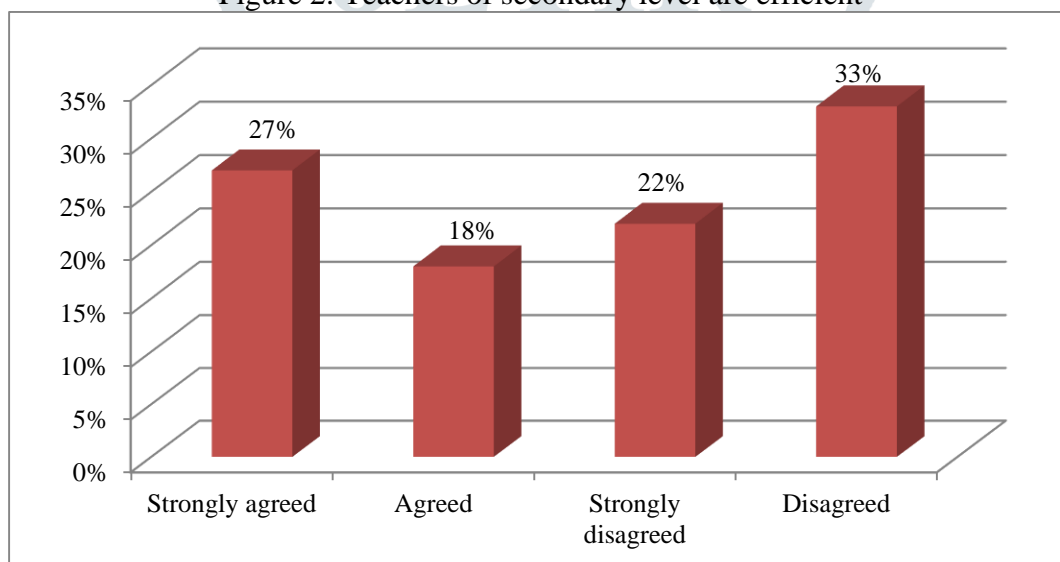
### RESULTS AND DISCUSSION

Figure 1: Teachers of secondary level are skilled enough



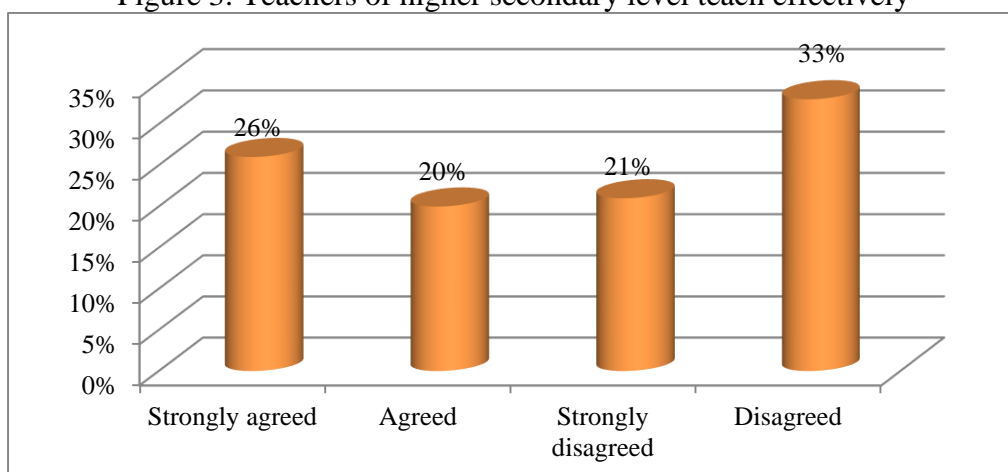
Teachers of secondary level are skilled enough has shown in the above graph. From the result it was found that 31% respondents were strongly disagreed that teachers of secondary level are skilled enough which was maximum but only 18% respondents were strongly agreed that teachers of secondary level are skilled enough which was minimum.

Figure 2: Teachers of secondary level are efficient



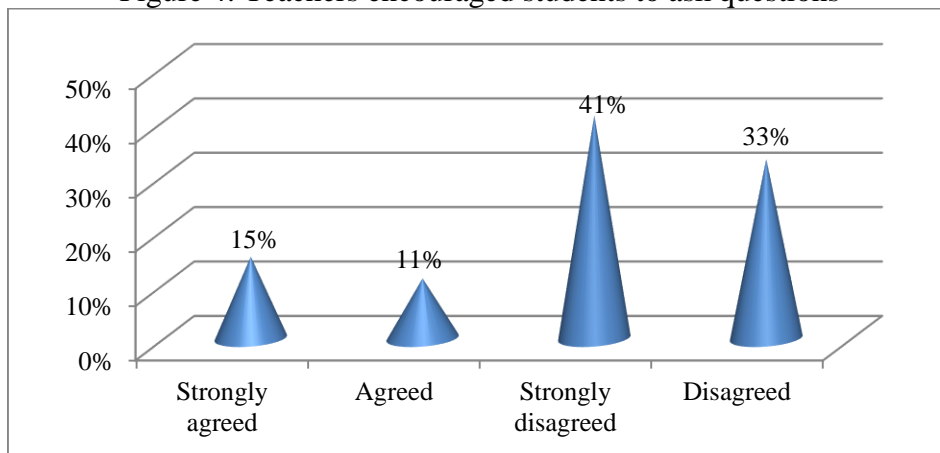
Teachers of secondary level are efficient has shown in the above graph. From the result it was found that 33% respondent were disagreed that teachers of secondary level are efficient which was maximum but only 18% respondents were agreed that teachers of secondary level are efficient which was minimum.

Figure 3: Teachers of higher secondary level teach effectively



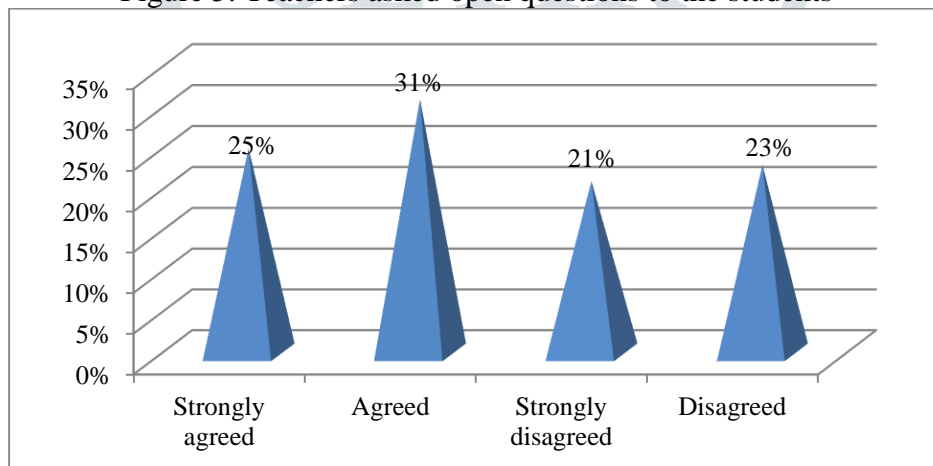
Teachers of higher secondary level teach effectively has shown in the above graph. From the result it was found that 33% respondent were disagreed that teachers of secondary level teach effectively which was maximum but only 20% respondents were agreed that teachers of secondary level teach effectively which was minimum.

Figure 4: Teachers encouraged students to ask questions



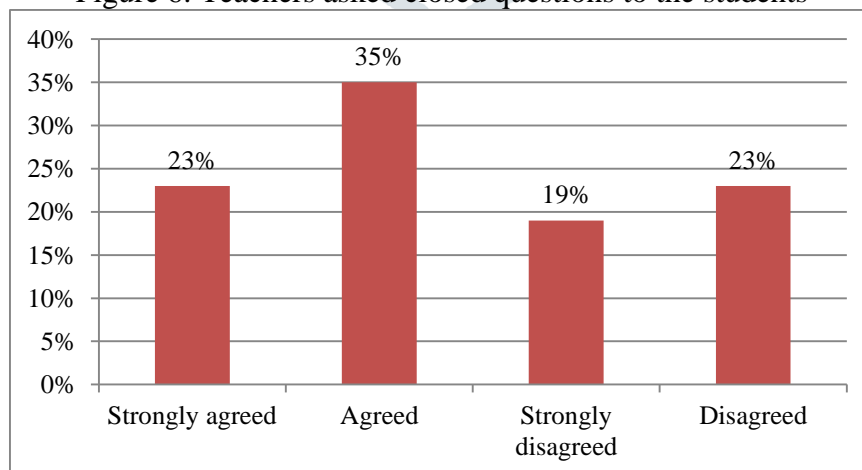
Teachers encouraged students to ask questions have shown in the above graph. From the result it was found that 41% respondents were strongly disagreed that teachers encouraged students to ask questions which was maximum but only 11% respondents were agreed that teachers encouraged students to ask questions which was minimum.

Figure 5: Teachers asked open questions to the students



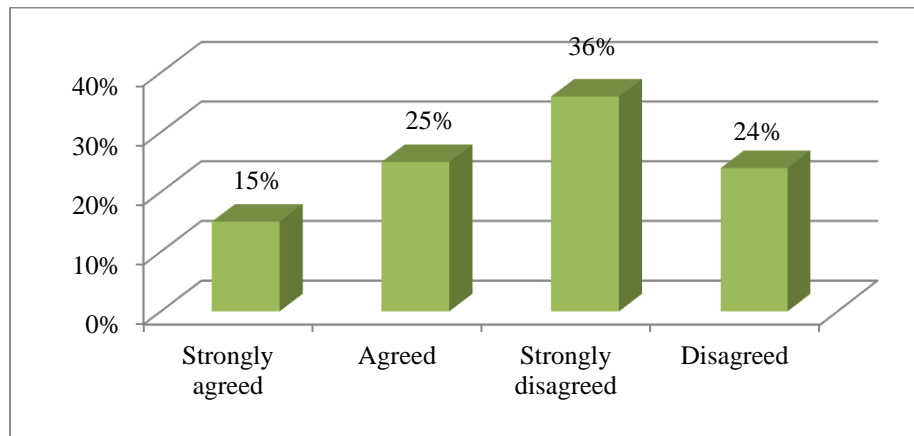
Teachers asked open questions to the students have shown in the above graph. From the result it was found that 31% respondents were agreed that teachers asked open questions to the students was maximum but only 21% respondents were strongly disagreed that teachers asked open questions to the students which was minimum.

Figure 6: Teachers asked closed questions to the students



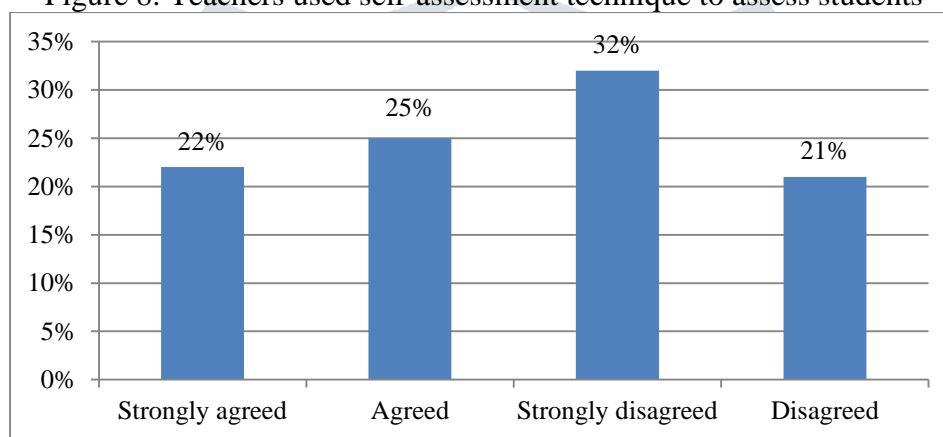
Teachers asked closed questions to the students have shown in the above graph. From the result it was found that 35% respondents were agreed that teachers asked closed questions to the students was maximum but only 19% respondents were strongly disagreed that teachers asked closed questions to the students which was minimum.

Figure 7: Teachers gave equal opportunities to all students to answer the questions



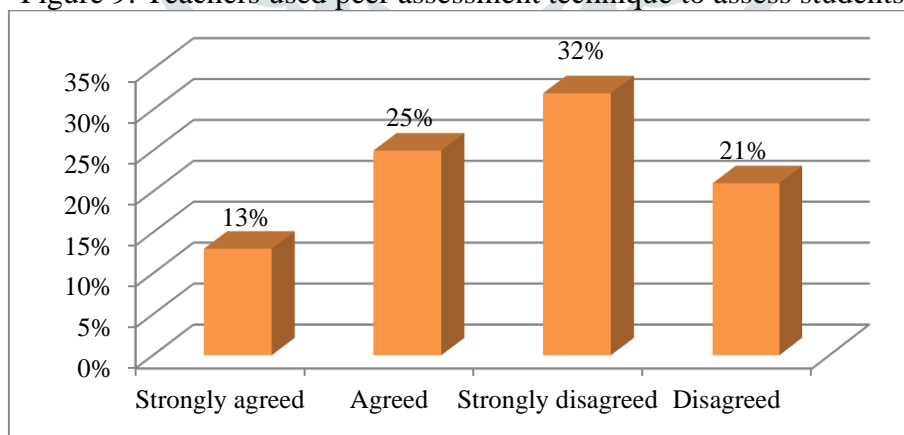
Teachers gave equal opportunities to all students to answer the questions has shown in the above graph. From the result it was found that 36% respondents were strongly disagreed that teachers gave equal opportunities to all students to answer the questions which were maximum but only 15% respondents were strongly agreed that teachers gave equal opportunities to all students to answer the questions which were minimum.

Figure 8: Teachers used self-assessment technique to assess students



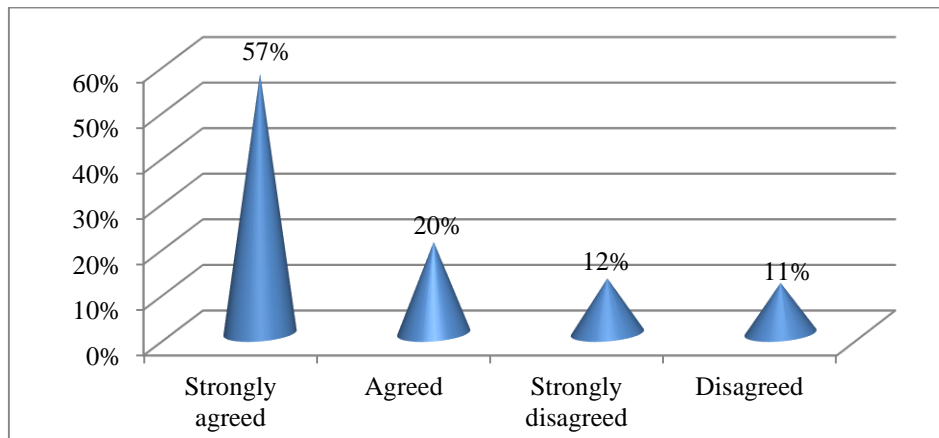
Teachers used self-assessment technique to assess students has shown in the above graph. From the result it was found that 32% respondents were strongly disagreed that teachers used self-assessment technique to assess students which were maximum but only 21% respondents were disagreed that teachers used self-assessment technique to assess students which were minimum.

Figure 9: Teachers used peer assessment technique to assess students



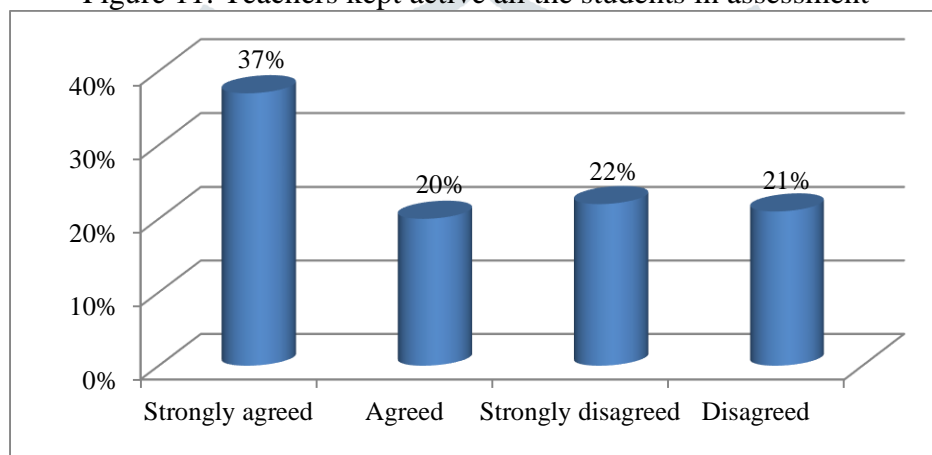
Teachers used peer assessment technique to assess students has shown in the above graph. From the result it was found that 32% respondents were strongly disagreed that teachers used peer assessment technique to assess students which were maximum but only 13% respondents were strongly agreed that teachers used peer assessment technique to assess students which were minimum.

Figure 10: Teachers assessed students through problem solving/investigation work



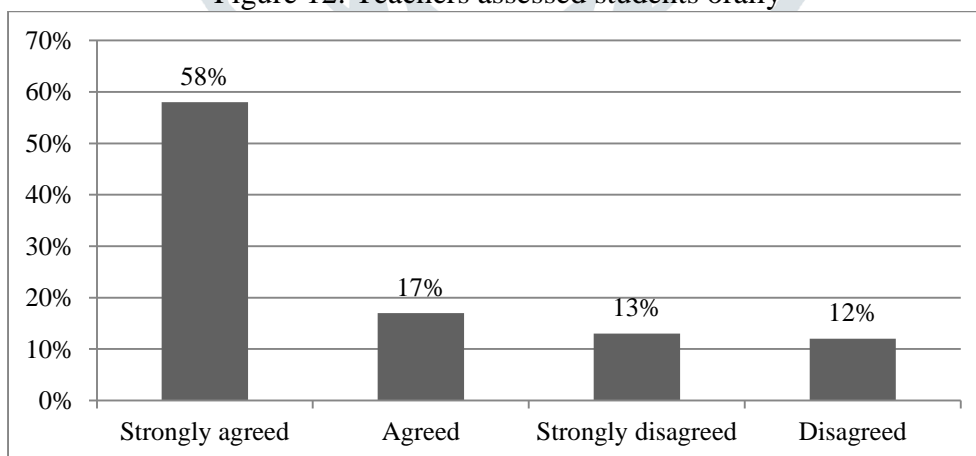
Teachers assessed students through problem solving/investigation work has shown in the above graph. From the result it was found that 57% respondents were strongly agreed that teachers assessed students through problem solving/investigation work which were maximum but only 11% respondents were disagreed that teachers assessed students through problem solving/investigation work which were minimum.

Figure 11: Teachers kept active all the students in assessment



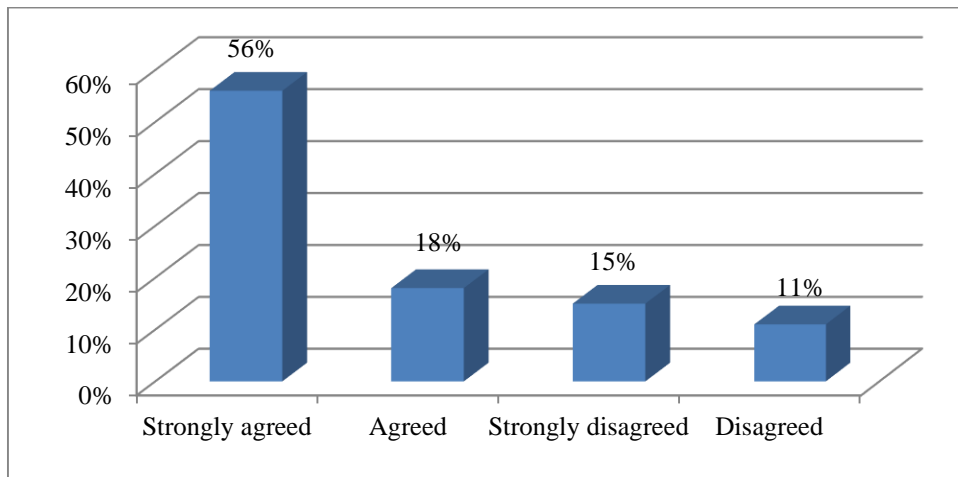
Teachers kept active all the students in assessment have shown in the above graph. From the result it was found that 37% respondents were strongly agreed that teachers kept active all the students in assessment which were maximum but only 20% respondents were agreed that teachers kept active all the students in assessment which were minimum.

Figure 12: Teachers assessed students orally



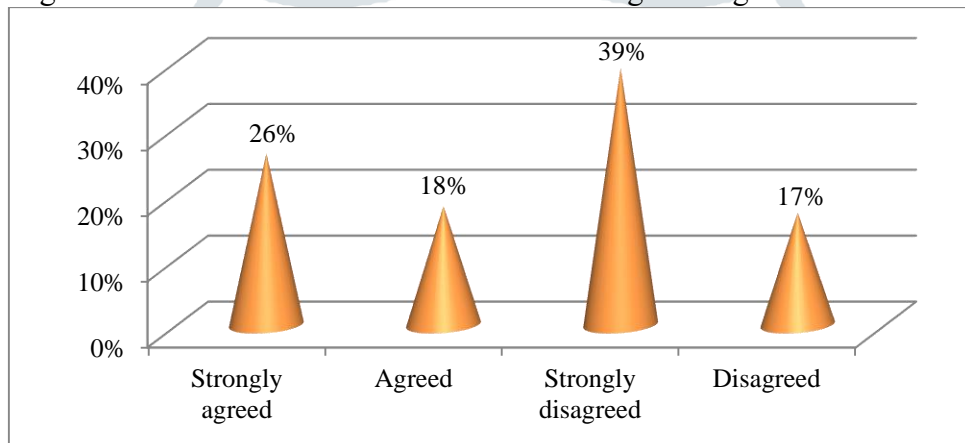
Teachers assessed students orally has shown in the above graph. From the result it was found that 58% respondents were strongly agreed that teachers assessed students orally which were maximum but only 12% respondents were disagreed that teachers assessed students orally which were minimum.

Figure 13: Teachers assessed students written (class work)



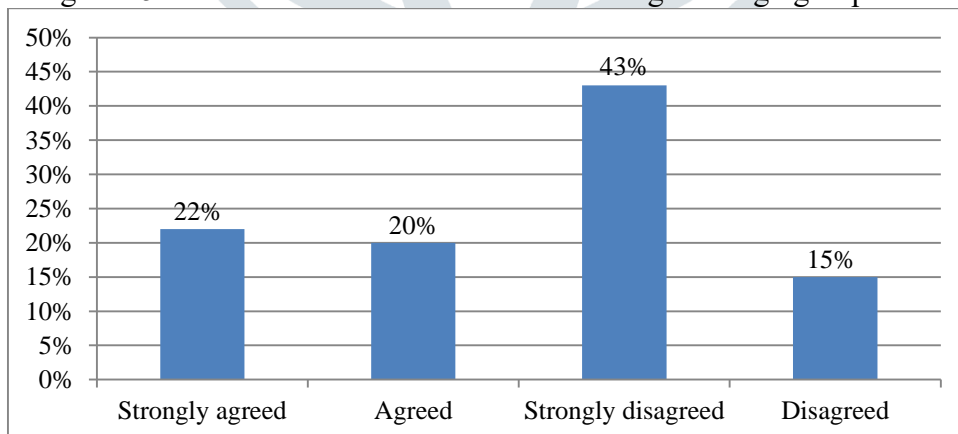
Teachers assessed students written (class work) has shown in the above graph. From the result it was found that 56% respondents were strongly agreed that teachers assessed students written (class work) which were maximum but only 11% respondents were disagreed that teachers assessed students written (class work) which were minimum.

Figure 14: Teachers assessed students' knowledge through individual work



Teachers assessed students' knowledge through individual work has shown in the above graph. From the result it was found that 39% respondents were strongly disagreed that teachers assessed students' knowledge through individual work which were maximum but only 17% respondents were disagreed that teachers assessed students' knowledge through individual work which were minimum.

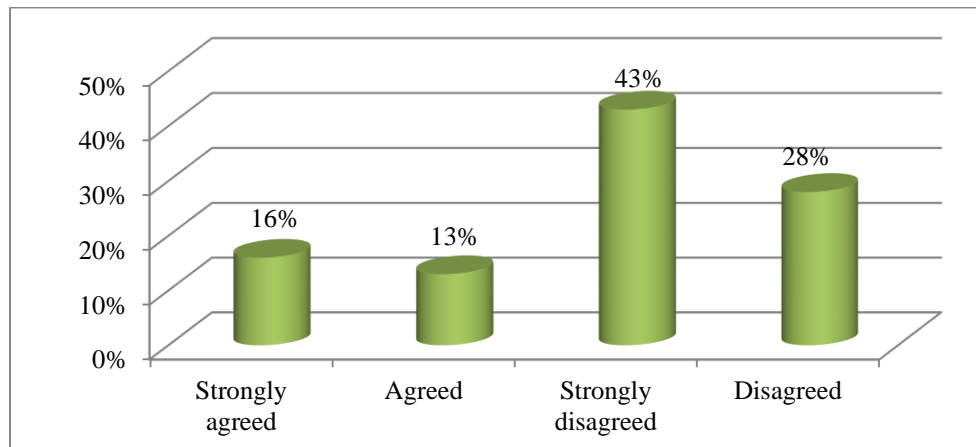
Figure 15: Teachers assessed students' knowledge through group work



Teachers assessed students' knowledge through group work has shown in the above graph. From the result it was found that 43% respondents were strongly disagreed that teachers assessed students' knowledge through group work which were maximum but only 15% respondents were disagreed that teachers assessed students' knowledge through group work which were minimum.

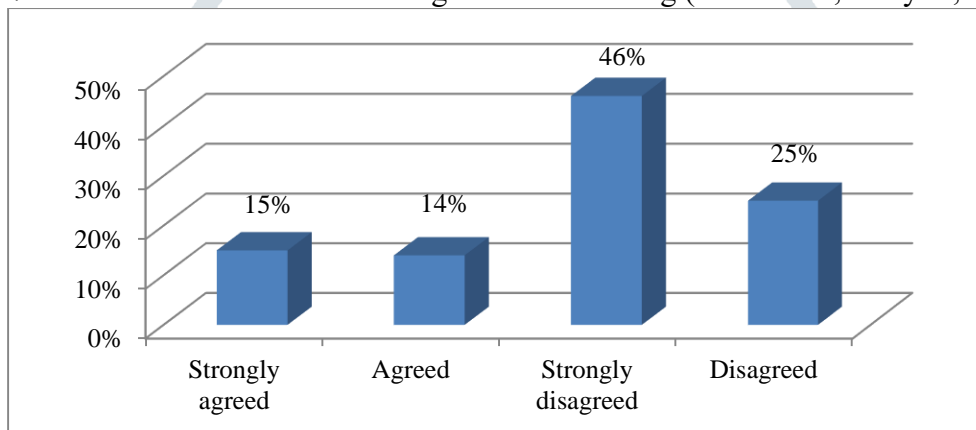
Figure 16: Teacher assessed students' lower order learning (Knowledge, understanding, application)





Teacher assessed students' lower order learning (Knowledge, understanding, application) has shown in the above graph. From the result it was found that 43% respondents were strongly disagreed that teachers assessed students' lower order learning (Knowledge, understanding, application) which were maximum but only 13% respondents were agreed that teachers assessed students' lower order learning (Knowledge, understanding, application) which were minimum.

Figure 17: Teachers assessed students' higher order learning (Evaluation, analysis, synthesis)



Teachers assessed students' higher order learning (Evaluation, analysis, synthesis) has shown in the above graph. From the result it was found that 46% respondents were strongly disagreed that teachers assessed students' higher order learning (Evaluation, analysis, synthesis) which were maximum but only 14% respondents were agreed that teachers assessed students' higher order learning (Evaluation, analysis, synthesis) which were minimum.

## CONCLUSION

Bangladesh, as an independent and developing nation, has to maintain her political, economic, social, and cultural relation with the rest of the globe through the quality education system. But the overall proficiency of the secondary education of the country has many scopes for further development in line with the 7th five year plan and Bangladesh National Education Policy 2010. The secondary school performance is a new idea to flourish with regard to quality education in Bangladesh. Most of the schools are not well performed although their pass rate is higher in the public examination. The performance of the students' in English, Mathematics, and Science Subjects is not satisfactory though they have been learning the important subjects from the beginning of schooling. So this system requires to be revisited. A well performed school should have some other strong components and most importantly schools should be the place where a student can learn the kind of life skills and complete education to be better qualified and equipped for future life.

This study has been carried out to extract the components of secondary school performance and to investigate the factors that work behind the secondary level school performance in rural areas of Bangladesh. In this respect, the study has fixed two research questions to answer properly. To answer the first research question, it is seen that teachers quality, students quality, leadership role of headmaster, catchment area, reputation of the school, teacher-student ratio, active SMC, textbook based lesson have strong effect on secondary school performance. A dedicated school leader and effective headmaster can change the school performance. The gap of teacher-student ratio must be reduced in order to get quality education and for further reinforcement teacher's quality should be increased. Those who are coming in the

non-govt. school as a teacher most of them are not qualified so a vicious circle of learning gap prevails in the arena of non-govt. secondary schools. To get out of this circle NTRCA are playing a great role recruit qualified teachers. Quality of student intake is a new criterion for secondary school performance, which was developed less in other studies. In the rural non-government school the authority have to struggle to earn money from the school, so they try to increase the number of the students rather than taking quality students. To answer the second research question, to determine the adequacy of the existing performance criteria by the government it is found that the idea of secondary school performance is shifting towards more comprehensive criteria.

Students are not strong in Mathematics, English, Geography, Science; they have some phobia on this subject. Schools should be well informed to sow the seeds of complete all round education.

## RECOMMENDATIONS

The main finding of this study was that teacher efficacy truly is the heart of school reform. The common theme throughout the study was the need for quality teachers simply because teachers directly affect student achievement more than any other factor. It is apparent that teachers must be supported in their growth professionally. Leaders who are able to aid in teachers' individual pursuit of professional goals reap the benefit of higher retention and greater job satisfaction from the perspective of teachers. As administrators provide opportunities for teachers to grow professionally through participation in activities, such as Professional Learning Communities, it is the responsibility of each individual teacher to take advantage of said opportunities, especially when there is a certain level of risk involved. This researcher recommends more studies regarding methods to increase the efficacy of entire staff teams be researched. Such research would provide administrators concrete strategies to affect unhealthy school environments. In recognition that teachers who work in diverse populations generally encounter a variety of ethnic groups, this researcher recommends that more studies examine successful interactions between teachers and minority students be researched.

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