

Efficiency in Primary, Secondary and Higher Secondary Education in Bangladesh: An Analysis

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Abstract No individual or no nation can prosper without education. Every education system has some aims and objectives so as to materialize a nation's dreams and aspirations. If the system fails to achieve the goals, it actually comes of no use for an individual as well as a nation. Rather it causes wastage of valuable money, time and energy. Internal efficiency is a very important indicator of a country's educational development, and on the other hand, wastage in education represents a country's educational backwardness. The rate of efficiency at Primary, Secondary and Higher Secondary levels in Bangladesh is not very satisfactory and wastage rate is very high. In this paper, the researchers have tried to show the actual nature of efficiency in Primary, Secondary and Higher secondary levels of Bangladesh and prescribe some recommendations to improve the situation.

Keywords Primary Education, Secondary Education, Higher Secondary Education, Efficiency, Wastage, Development

1. Introduction

Education leads a nation to the path of development and prosperity. The more developed a country's education system is, the more developed a country's development will be. Mundane and unplanned education system cannot fulfill a nation's hopes and aspirations. For this the education system must be well-planned, need-based and up-to-date and it should maintain a high standard of quality. Internal efficiency is a major indicator of development in education. But unfortunately the internal efficiency rate at Primary, Secondary and Higher Secondary levels is very low and, on the contrary, the wastage rate is very high. This scenario of education in an independent and developing country like Bangladesh is not desirable at all. So, the reasons behind the in efficiency problem in education have to be immediately found out and proper measures should be taken to remove the problem.

2. Methodology and Objectives of the Paper

In this paper the researchers have tried to find out the actual condition of efficiency in education at the Primary, Secondary and Higher Secondary levels in Bangladesh. Answers to two basic research questions have been searched for in this regard. These two questions are: (i) What is the

efficiency rate in the Primary, Secondary and Higher Secondary levels in Bangladesh? (ii) What are the reasons behind failure to achieve the expected efficiency rate in these levels? In search of the answers of the two questions the researchers have collected information from browsing, readings and from secondary sources like different books, articles, documents, encyclopedia etc. The objectives of the Paper are to determine the nature of efficiency at Primary, Secondary and Higher Secondary levels of education in Bangladesh and to prescribe some suggestions to overcome the inefficiency problem.

3. Efficiency in Education

To achieve desired goals with proper use of money, time and intelligence is termed as efficiency in the field of an occupation or a profession. According to **Donald Naismith** efficiency is producing a satisfactory result without wasting time and resources. It also means degree of success with which targets are met in relation to the resources used (**Naismith, 1970**). The ability of achieving expected goals through sincere efforts and performance is called efficiency. Efficiency is a very important factor in all objective-based activities. Education is also a target-oriented sector. By using resources, time, intelligence, experience etc. and following rules and strategies properly to achieve desired outcomes in the field of education is termed as efficiency in education.

3.1. Types of Efficiency

There are two types of efficiency in education--Internal Efficiency and External Efficiency.

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3.2. Internal Efficiency

Achieving targeted success in a particular curriculum of a certain stage and completion of the curriculum or course in limited timeframe in an institution is called internal efficiency in education. If 100 students, for example, get admitted into a primary school and all the students can complete their 5-year education and pass out the exams successfully, and if there is no drop-outs, then it can be understood that the primary school possesses a very high standard of internal efficiency. To measure internal efficiency in education some indicators are used. These include: (i) Promotion Rate, (ii) Repetition Rate, (iii) Drop-out Rate, (iv) Adjusted Promotion Rate, (v) Survivors to the Grade, (vi) Average Study Time at Grade, (vii) Pupil-years invested Per Graduate etc.

3.3. Efficiency of Education in Some Selected Countries of the World

School efficiency varies significantly across countries, influenced by management practices, resource allocation, and educational policies. Here are some key insights from a number of selected countries that will help us determine and evaluate the state of efficiency in Primary, Secondary and Higher Secondary level education in Bangladesh:

Finland: Finland consistently ranks high in educational efficiency. This success is attributed to well-trained teachers, a strong emphasis on equal opportunities for all students, and minimal reliance on standardized testing. Finnish schools foster an environment that encourages creativity and critical thinking, leading to high student achievement levels in international assessments like PISA (PISA, 2022).

Singapore: Singapore's education system is known for its efficiency and high performance in global rankings. The country places a strong emphasis on STEM (Science, Technology, Engineering, and Mathematics) education and rigorous academic standards. Singaporean schools benefit from a centralized education system that ensures consistent quality and resources across schools (PISA, 2022).

Japan: Japan also performs well in terms of school efficiency, with a strong focus on discipline, respect, and a well-rounded education. The Japanese education system emphasizes hard work and perseverance, supported by well-structured curricula and extensive after-school tutoring programs, which contribute to high PISA scores (PISA, 2022).

United States: The efficiency of schools in the United States is more variable, with significant differences between public, private, and charter schools. Effective management practices, such as those found in some charter schools, have been linked to better student outcomes. However, challenges such as resource allocation and socio-economic disparities affect overall efficiency. Innovative management practices and autonomy in school operations have been shown to improve efficiency in some cases (Bhutocia et al, 2022).

Latin America (Ecuador and Paraguay): In Latin America, there are notable differences in school efficiency. Ecuador, for example, shows relatively higher efficiency in its schools compared to Paraguay. This is largely due to differences in management practices and the allocation of resources between public and private schools. Effective school management, including the use of data to inform decisions and fostering inclusive environments, plays a crucial role in improving efficiency (OECD, 2023).

Middle East and North Africa (MENA): School efficiency in the MENA region varies widely. Countries with better management practices and higher levels of school autonomy tend to achieve better outcomes. Research highlights that managerial aspects such as monitoring student performance, involving multiple stakeholders, and maintaining discipline are crucial for optimizing school efficiency. Schools that effectively manage their resources and staff tend to perform better in terms of student achievements. In summary, while there are universal factors that contribute to school efficiency, such as effective management practices and equitable resource allocation, the specific strategies and outcomes can vary significantly based on local contexts and policies (Bhutonia et al, 2022).

3.4. Internal Efficiency in Education in Bangladesh

Internal efficiency is very significant for any education system. Quality of education in an institution depends on the internal efficiency thereof. When we analyze the education system of Bangladesh, it is observed that at different levels of education especially at Primary, Secondary and Higher Secondary levels the standard of internal efficiency is not much satisfactory.

The following Tables will show the situation of internal efficiency more clearly:

Table 3.4.A. Year wise Gross Enrolment Ratio (GER), Net Entrapment Ratio (NER) and Cycle Dropout Rate in Primary Education in 2018-2022

| Year | GER (%) | | | NER (%) | | | Dropout Rate (%) |
|------|---------|--------|--------|---------|-------|-------|------------------|
| | Boys | Girls | Total | Boys | Girls | Total | |
| 2018 | 110.32 | 118.30 | 114.23 | 97.55 | 98.16 | 97.85 | 18.60 |
| 2019 | 104.49 | 114.93 | 109.60 | 97.65 | 98.01 | 97.74 | 17.90 |
| 2020 | 100.10 | 108.90 | 104.90 | 97.37 | 98.25 | 97.81 | 17.20 |
| 2021 | 105.32 | 106.14 | 105.72 | 97.39 | 97.44 | 97.42 | 14.15 |
| 2022 | 103.16 | 118.46 | 110.48 | 97.52 | 97.81 | 97.56 | 13.95 |

Source: APSC Report 2022, DPE, Bangladesh

Table 3.4.B. Dropout and Completion Rate, GER and NER in Secondary level in 2018-2022

| Year | GER | | | NER | | | Dropout Rate (%) | | | Completion Rate (%) | | |
|------|-------|-------|-------|-------|-------|-------|------------------|-------|-------|---------------------|-------|-------|
| | Both | Boys | Girls | Both | Boys | Girls | Both | Boys | Girls | Both | Boys | Girls |
| 2018 | 75.32 | 69.56 | 82.50 | 69.38 | 64.47 | 74.68 | 37.62 | 36.01 | 40.19 | 62.38 | 63.99 | 59.81 |
| 2019 | 76.38 | 67.83 | 83.36 | 67.30 | 60.11 | 74.47 | 36.73 | 35.52 | 37.67 | 63.27 | 64.48 | 62.33 |
| 2020 | 75.38 | 67.13 | 85.19 | 71.89 | 62.89 | 80.62 | 35.76 | 36.80 | 34.86 | 64.24 | 63.20 | 65.14 |
| 2021 | 75.52 | 66.40 | 83.15 | 70.25 | 63.29 | 79.09 | 35.66 | 32.50 | 40.29 | 64.34 | 67.50 | 59.71 |
| 2022 | 76.18 | 69.10 | 83.20 | 73.76 | 67.60 | 80.02 | 35.98 | 33.25 | 40.78 | 64.02 | 66.75 | 59.22 |

Source: APSC Report 2022, DPE, Bangladesh

Table 3.4.C. Student Participation and Dropout Rate in Higher Secondary level in 2018-2022

| Year | GER (%) | | | NER (%) | | | Dropout Rate (%) | Completion Rate (%) |
|------|---------|-------|-------|---------|-------|-------|------------------|---------------------|
| | Both | Boys | Girls | Both | Boys | Girls | Total | Total |
| 2018 | 43.80 | 45.35 | 42.16 | 35.43 | 36.88 | 33.9 | 19.63 | 80.37 |
| 2019 | 47.32 | 48.68 | 45.87 | 35.81 | 31.72 | 36.99 | 18.55 | 81.45 |
| 2020 | 48.39 | 49.19 | 47.54 | 36.40 | 36.53 | 36.97 | 21.16 | 78.84 |
| 2021 | 48.79 | 48.50 | 49.88 | 40.54 | 41.88 | 40.44 | 21.14 | 78.86 |
| 2022 | 47.70 | 46.79 | 48.71 | 44.42 | 44.26 | 44.61 | 22.72 | 77.28 |

Source: APSC Report 2022, DPE, Bangladesh

Table 3.4.D. Survival Rate and Coefficient of Internal Efficiency in Primary, Secondary and Higher Secondary levels in 2022 and 2021

| Type of Education | 2022 | | | | | | 2021 | | | | | |
|-------------------|-------------------|-------|-------|------------------------------------|-------|-------|-------------------|-------|-------|------------------------------------|-------|-------|
| | Survival Rate (%) | | | Coefficient of Internal Efficiency | | | Survival Rate (%) | | | Coefficient of Internal Efficiency | | |
| | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls | Total | Boys | Girls |
| Primary | 86.25 | 85.40 | 87.80 | 87.36 | 87.40 | 88.00 | 86.20 | 85.25 | 87.10 | 85.35 | 84.20 | 86.50 |
| Secondary | 72.93 | 71.03 | 73.89 | 79.01 | 79.83 | 81.07 | 72.56 | 70.88 | 73.14 | 78.40 | 79.54 | 80.02 |
| Higher Secondary | 79.23 | 84.57 | 75.76 | 77.27 | 75.03 | 78.48 | 48.86 | 84.32 | 75.44 | 76.52 | 77.28 | 74.86 |

Source: APSC Report 2022, DPE, Bangladesh

It is seen in the Table 3.4.A that Gross Enrolment Ratio remained almost same in last five years (2018-2022) and Net Enrolment Rate decreased from 114.23 in the year 2018 to 110.48 in 2022. Cycle Dropout Rate decreased from 18.60 (in 2018) to 13.95 (in 2022). But it is deplorable that a survey revealed that after completing five-year education only two-third of the primary students can achieve the expected standard of literacy. Most of them enter into adolescence without learning the preparatory lessons to lead their lives ahead. Though the situation has been improved a little in recent years, but their present learning ability remained almost the same as in 2005 (Nath 2005). In other words, the targeted and fruitful outcome is yet to reach.

GER and NER was 75.32% and 69.38% respectively (Table 3.3.B) in 2018 and 76.18% and 73.76% in 2022. Completion rate was 62.38 in 2018 and rose to 64.02% in 2022. Dropout rates have been slightly decreasing from 37.62 in 2018 to 35.98 in 2022. The overall situation of Secondary education has been gradually improving during last five years.

GER and NER was 43.80% and 35.43% respectively in 2018 and reached to 47.10% and 44.26% in 2022 in Higher Secondary Level (Table 3.3.C). Total Dropout rate was

19.63% in 2018 but it reached 22.72% in 2022 Likewise total Completion rate decreased from 80.37% (2018) to 77.28% in 2022, The overall situation is not satisfactory.

As a result of the growth of access, retention and survival of students in the Primary, Secondary and Higher Secondary levels coefficient of efficiency rate has been increasing from 85.35%, 78.40 % and 76.52% in 2021 to 87.36, 79.01 and 77.27 in 2022 (Table 3.4.D) but the efficiency rising rate is not something to be highly satisfied with. So it is high time we found the hindrances in the way to achieve expected internal efficiency.

3.5. Obstacles to Achieving Internal Efficiency

Achieving internal efficiency by educational institutions is the pre-requisite of upgrading education. But education sector in Bangladesh is beset with various problems that hamper the smooth and expected achievement of efficiency in the field of education. The basic problems include:

- **Old and Traditional Management Systems of Institutions**

The world is changing rapidly and so is changing the thinking and ideas of people. Educational institutions must

keep pace with the changing world. Systems must be innovative and updated. But our education is still following very old and traditional management system that fails to evaluate and ensure the demands of the students.

- **Faulty Assessment System**

Students are imparted education with some objectives in mind. How much of the objectives has been achieved by a student after the completion of a given course is determined by assessment and evaluation. But our evaluation system is mainly written test oriented. A student's success or failure is measured by the results of the written test only. As a result, a student remains eager just to pass the tests and not to earn knowledge and efficiency. Again, many of the students show much talent in extracurricular activities, but these qualities are completely ignored in the so-called examination systems. Thus students' talent and efficiency in the correlated fields, other than facts and theories is not given importance.

- **Lack of Efficient and Well-versed Teachers**

There is no alternative to education in building a prosperous nation and making good citizens. Teachers play the most vital role in materializing the dreams of an individual and a nation through proper handling of education. That's why teaching is a very noble and esteemed profession across the globe. So teachers must have very good moral character, vast knowledge and much efficiency in related field. But unfortunately many of our teachers lack efficiency, expertise and knowledge that an ideal and smart teacher should possess. Highly qualified and enthusiastic teachers are not interested for taking up teaching as a career as the salary of a teacher is meager and social status is negligible. In most cases when a job-seeker fails to manage jobs in other sectors comes to be a teacher. Most of these teachers are not qualified enough and do not have passion to learn more. They do not have devotion and respect to their profession. So they fail to teach and motivate the students properly. A most important truth which we are apt to forget, is that a teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame. (Tagore, 1994). Thus, the inefficient teachers themselves are obstacles to achieving internal efficiency of an institutions.

- **Lack of Intimate Relationship between Guardians and Teachers**

Education becomes successful with the integrated effort of guardians, teachers and students. The guardians support and bear the educational expenses and the teachers inspire and assist students to continue education. So the relation between the teachers and the guardians should be very intimate and cooperative. But there are so many guardians who do not care what their children are doing in the schools and whether they are conducting their education properly or not. As a result, a student may experience multi-faceted problems and derail from the right path. For want of combined efforts and hearty relationship between the teachers and guardians very often disasters may happen to a student's life.

- **Role of the Managing Committee**

The Managing Committee is the guiding authority of a school. Expected development of a school mainly depends on the proper management of the Committee. But in Bangladesh very often the development of a school is hampered by unjust and inconsiderate decisions of the committee. Since a school is run by the directions and guidance by the Managing Committee, its wrong and autocrat decisions may bring curse to a school, especially when it appoints inefficient and unsuitable candidates as teachers by corruption, ignoring better candidates. As a result, proper teaching-learning activities of a school cannot be run.

- **Repulsion to Teaching Profession**

At present the status of teaching as a profession in our society from Primary to the highest level is so depressing that qualified people do not feel much attraction to this profession. Though the university teachers receive highest financial benefits among the teaching community, their salaries, status, allowances and other benefits are much more less than that of the government officials of same rank and qualifications. Again the financial status of non-government teachers is worse than that of government primary, high school and college teachers. So non-government teachers have to be engaged in other activities or teach somewhere else for earning more money to live a somewhat decent life. Naturally these teachers cannot give much time and attention to their mother institutions. Consequently proper and smooth functioning of the institutions is hampered and ensuring quality education is becoming very difficult.

3.6. Recommendations

- **Provisions for Stipends for both Boys and Girls**

Both boys and girls should be treated equally, as they play equal role in the family and society. So the guardians and teachers should nurture both the sexes equally to ensure their development. The government should not treat the learners as 'boys' and 'girls', rather they should be treated as 'students'. At present stipends are provided only to girls of schools and colleges, but boys do not get such financial help. As a result, boys are very often getting engaged in various activities for earning money neglecting studies. It causes wastage and inefficiency in education.

- **Reformation of Testing and Evaluation Systems**

Our existing evaluation system is faulty and it is fully examination-oriented. This should be reformed in no time. Evaluation is the method of gathering information about all personal traits of a student namely his/her health, attitude and aptitude, manner of expression, values, creativity etc. and taking decisions on the basis of these traits. On the other hand, an examination is the process of assessing students' knowledge in a particular subject. The assessment process in the schools and colleges in our country is mostly dependent on tests to know how much knowledge a student has gathered from given subjects after completion of a particular class or a particular course or syllabus. This sort of test or

assessment actually cannot judge a student's achievements and personal talent properly. So, the current evaluation system should be reformed and stress should be given to evaluate a student's feelings and psycho-motor qualities. Internationally recognized grading system should be followed in preparing results.

- **Ensuring Accountability of Guardians and Teachers**

If accountability of guardians and teachers can be ensured, wastage of education can be reduced to a great extent. If there can be such provisions in our education system that all citizens must send their children to school and all teachers should account for the problems like dropouts, failure of the students, then possibility of wastage or inefficiency in education can be decreased. Concerted effort and cooperation of teachers, students and guardians can run educational activities smoothly.

- **Compression of Syllabus**

Curriculum is the main guideline of an education system and syllabus is an essential part of that curriculum. In our syllabus many such things are included with which there is no relationship of the actual need of the students or society. Syllabus should not be overweighed. It should be according to the need, age, merit and acceptability of a student. A syllabus should echo the country's running economic, social, political, cultural, religious, and moral conditions and practices so that knowledge and ability of the students can be changed positively. To ensure real-life and need-based education, irrelevant and useless topics should be curtailed from the syllabus.

- **Promotion Rule should be Flexible**

In our present education system if a student fails in any subject in a class, he is not promoted to the next upper class. This system simply wastes time, merit and money of that student. To remove such kind of wastage in education, flexible promotion rules should be introduced. A student should be promoted to next class even if he fails in one or two subjects and necessary steps should be taken so that the student can pass the failed subjects along with the new subjects of the new class.

- **Special Measures Should be Taken for the Weak and Less Meritorious Students**

In every class of a school there remain some weak and less meritorious students. More often they are not detected and treated as other general students of the class. Teachers should identify those backward students and take necessary steps for their all out development. By taking special care their weakness can be removed and they can be attached to the mainstream of the class.

- **Co-curricular Activities should be Given Importance**

No curriculum or Education Commission has prescribed so far that co-curricular activities should be given as much importance as the main subjects. Co-curricular activities are considered here as secondary or less important things. A learner's creativity and intelligence is developed through

co-curricular activities. If a learner can show extraordinary talent in music other than general education for example, he or she can take up music as his/her future profession. Discovering students' latent faculties in curricular activities measures should be taken to develop them from the primary level so that they can choose their fields of interest as their future career (Malek *et al.*, 2012).

- **Students' Role in Choosing Subjects**

Most often the students cannot choose the subjects they like. Choosing subjects is controlled by the will and liking of their parents. This should not be. What the students want to be in future and which subjects interest them should be determined by the students themselves. Thus they will feel much interest in those subjects and study them with eagerness. This will definitely bring good results.

- **Recruiting Qualified Teachers and Arranging Consecutive Training for them**

To ensure and uplift the quality of education qualified and dedicated teachers should be appointed. Frequent arrangements should be made for basic and subject-based training, in-job training and reviving training for the teachers after a certain period of time. If needed training from other countries should be provided. There should be compulsion that a teacher must complete certain training in a particular time-frame and participate in order training programmers, workshops, seminars, symposiums etc. held from time to time.

- **Provisions for Befitting Salaries and Allowances for the Teachers**

Teachers are the driving force of an education system and builders of a nation. But teachers in our country are losing interest and enthusiasm to their profession as their salaries, allowances and other facilities are quite unsatisfactory. Again there remain noticeable differences between the wages of government-owned institutions and non-government institutions. This difference must be removed. All teachers irrespective of government or non-government must be provided with suitable monetary and other facilities so that they can lead a want-free and decent life with honor and dignity. With adequate salaries and other benefits teachers will be more willing and dedicated to discharge their earnest and sincere service and build up the nation.

- **Creating Opportunities for Self-employment**

Skilled manpower is the key to national development. For new discoveries and inventions of science and technology the strategies of development are changing day by day. To cope with these changes our students must be made fit with technical and vocational education so that they can engage themselves in self-employment. Technical and vocational education should be made compulsory as general education. Besides such subjects should be included in the school curriculum as will enable the students to manage employment even after the completion of class Eight. Students should be well-trained and facilitated with such skills and expertise that will be helpful to engage them in work and enable them to earn their own livelihood by themselves.

• Ensuring Reasonable Student-Teacher Ratio

At present there prevails a restless condition everywhere the society. The students are also restless in some way or other. Besides, the young students are becoming less serious about their studies nowadays. Again the class-size of our educational institutions are unusually large. It is a very big challenge for a teacher to ensure discipline and learning friendly atmosphere in such big large classrooms. Naturally it is impossible on a teacher's part to impart successful education and give proper attention to a hundred or more students in a classroom. For this, ensuring a reasonable student-teacher ratio is very much needed. It should be 1:30 for primary level and 1:40 for secondary and other higher levels in Bangladesh.

3.7. External Efficiency

External efficiency means efficiency of making a suitable livelihood after the completion of a certain education level successfully without any breach or wastage of time. It may be managing a job in any sector or self-employment by which a person can develop his economic and social life and not remain unemployed any more. But in Bangladesh the level of external efficiency is not at all satisfactory. We have so many people with academic certificates but we do not have available employment opportunities. Inadequacy of work sector is a reason behind it but main reason is the lack of proper and up-to-date education. The education system at various levels in Bangladesh is mainly based on theories and information. Students have no scope for practical work experience in the educational institutions. No importance is given on activity-oriented education like technical and vocational education. As a result, most of the academic certificate holders cannot manage a job in the country and cannot go abroad for work for not having any skill or expertise in the related work field.

4. Conclusions

Lack of efficiency in education means wastage in education. When the aims and objectives of education are not achieved then education becomes useless. With low efficiency in education Bangladesh is undergoing problem of wastage every year. Education has been going through a transitional period since the beginning of the twentieth century. Various changes have been taking place in all stages of education in the last few decades all over the world. Bangladesh is a small country with a large population. Most of the people are unskilled and unemployed. At all the stages of education efficiency rate is noticeably low and, on the contrary, the wastage rate is very high unlike the developed countries of the world like Finland, Singapore, Japan, United States, Latin America and MENA countries. Obviously this

situation is not good and desirable for a country's education system. So rethinking and reshaping of education is a crying need for our country. It is high time we reduced the wastage rate and increased the efficiency level by undertaking effective and realistic measures. Otherwise we will not be able to keep pace with the advancing world and achieve the Millennium Development Goals (MDGs) or Sustainable Development Goals (SDGs). Other development measures will also be fruitless unless we can ensure a well-planned, well-balanced and meaningful education system for our country as education is considered as the most pivotal and influential tool for development of any country. Sometimes new initiatives are taken to reform the education system, but most of the times the initiatives fail. It is self-evident that not everything that is new is good and that not all change is desirable. Criticality is the function that allows us to examine our ventures. We might look at how they match our goals, how they relate to what has already been explored, how they are perceived by others, how they relate to a particular theory or view of the world, and what the consequences might be (Greenwood, 2013).

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