

COVID-19 and Higher Education in Bangladesh: A Case for Dual-Mode Education

Abul Hasan M. Sadeq*
Zahirul Islam Sikder**
Mst. Tasqurun Nessa***

Abstract

This study looks into the effect of COVID-19 on education, specifically higher education in Bangladesh, which led to a new insight into facilitating higher education to all potential knowledge seekers, both rural and urban, and even into the potentiality of exporting higher education overseas. It is a truism that the development of human resources is crucial for a nation for its growth, development, and prosperity in all areas and fields. Bangladesh is a highly populated country. According to the UNDP report in 2010 on HDI, Bangladesh's HDI rose by 2.0% annually from 0.259 to 0.469, giving the country a rank of 129 out of 169 countries. If some effective programs can be undertaken to develop HR, a better quality of life for the people is possible, and thus the economy of Bangladesh may experience actual development. During COVID 19, the institutions of higher learning were shut down, and online education was introduced. The universities and the students initially faced challenges in adopting this method of education, but they were finally able to cope with the phenomenon. It provided new insight that online education is probably a better alternative to side-by-side campus education since it is difficult to cover the entire rural economy with a limited number of city-based campus-based universities. This insight may serve as a guideline for governments, policymakers, technology developers, and university authorities to make better policy choices in the future.

Keywords COVID-19 · Higher education · Dual-modes of education · HRD · Online education · WTO · Bangladesh

* Founder and Founder VC, Asian University of Bangladesh.

** Founder and Founder Principal, Dhaka City International College. E-mail: sikder67@yahoo.com

*** Assistant Prof. and Head, Department of Economics, Asian University of Bangladesh.

1. Introduction

Covid-19 affected the entire world in all spheres of life, including education, which affected the human resource development plans of the countries of the world. The effect on Bangladesh is even worse since it is a rural economy where the institutions of higher learning are based in the cities without access to the rural masses to higher education. The pandemic led to the closure of the universities even in the cities, not to speak of the miserable fate of the knowledge seekers of rural areas. The only alternative was online education, which was unfamiliar to institutions of higher learning in Bangladesh. Finally, however, the higher education authorities in Bangladesh provided a framework for online education. The truth is that online education is imperative to facilitate human resource development in a country like Bangladesh, encompassing the country's entire population. Thus, this forced introduction of online education due to Covid-19 was a blessing in disguise. The paper proposes to look into this matter more closely to develop the idea of a dual-mode education in the country, which can facilitate education for rural masses. This paper deals with the relationship between HRD and economic development per se, the phenomenon of higher education and HRD in the context of Bangladesh, the Bangladesh experience of higher education in the Covid-19 period, and the relevance of this experience for HRD in Bangladesh with a micro example. It leads to a proposal of a Dual Mode Education for HRD in Bangladesh for an inclusive HRD plan and worldwide export of education services from Bangladesh.

2. Objectives of the Study

The objectives covered in this paper are as below:

1. To explore the relationship between higher education, human resource development, and the economic development of a nation.
2. To examine the degree of accessibility of higher education in Bangladesh and look into the public policy related to HRD.
3. To elaborate on the higher education scenario in Bangladesh during COVID-19 period.
4. To propose an alternative mode of education in Bangladesh based on the Covid-19 experience, namely, the dual-modes of education.

3. Education, HRD, and Economic Development

Human resources play a pivotal role in attaining economic development since human resources are the real engine of growth, ensuring proper utilisation of its physical resources and the country's production potential. However, its role depends on the numbers and quality of human resources development (HRD). The unskilled labour force becomes a liability rather than an asset. Human resources become more productive when developed with the required qualities, involving formal and informal processes by which individuals learn and acquire knowledge and skills to perform various tasks or functions associated with their expected roles.

Education is the most helpful instrument in human capital formation efforts or a vehicle of social transformation. More than any single initiative, education can foster development, awaken talents, empower people, and protect their rights (UNICEF, 2000). The formal and informal education process enables a man to be turned into a human resource. A man is considered a human resource when actively involves himself in the productive social process.

Formal education is an effective means for the needed HRD, for the transformation of society through the development of human resources. Besides an individual's understanding of himself, his community, his natural environment, access to his cultural heritage, and improving his living standards, education teaches one the art of doing things with better skills and higher productivity. Skilled labour can produce manifold more than unskilled labour can do. An educated and efficient manager can do a miracle compared to an uneducated manager in managerial efficiency. Besides, an educated workforce can lead to process and product innovations resulting in higher and better goods and services at lower costs. The end outcome is the economic and overall development of a nation.

All the above stated are supported by the phenomenon of the world. World data shows a strong positive relationship between literacy rate and human development, showing a further positive relationship between literacy rate and economic development.

Table 1: Literacy Rate in Developed, Developing, and underdeveloped Country

Name of the Country		Literacy Rate	Human Development Index
Developed Country	Norway	99.00%	0.957
	Australia	99.00%	0.944
Developing Country	India	75%	0.645
	Bangladesh	74.9 %	0.632
Underdeveloped Country	Yemen	54.10%	0.470
	South Sudan	34.52 %	0.433

Source: Wikipedia, Human Development Report Office, 2020, Statista 2019

As the table shows, more than 90% literacy rate is associated with more than 0.9 human development index (HDI). Relevant countries lie in the classification of developed countries, such as Norway and Australia. A more than 70% literacy rate is associated with more than 0.6 HDI, and relevant countries are classified as developing countries, such as India and Bangladesh. On the other hand, about 50% and 30% literacy rates are associated with an HDI of about 0.4, and relevant countries lie in under-developed countries, such as Yemen and South Sudan. There is a strong positive relationship between literacy rate and economic development through HDI, which may be considered a proxy of HRD. A more accurate relationship between the variables can be obtained if the data for higher education can be used instead of literacy rate.

4. Accessibility of Higher Education in Bangladesh

Bangladesh is a low-income country and a rural-based economy. Higher education is not accessible to a great majority of potential students due to several reasons, such as the following:

4.1 Vocational Disadvantage: Rural-urban Mismatch

Almost 65% of the population lives in the rural areas of Bangladesh, whereas the institutions of higher learning are more or less located in urban areas.

Thus these institutions are not readily accessible to the potential students from the rural areas due to the locational disadvantages.

The potential students can avail of urban-based higher education only if they travel and take residence in urban areas for higher education, which becomes very expensive. They cannot afford this.

Even if some of them can afford to go to public universities, these universities cannot accommodate them due to an acute shortage of seats compared to the number of potential students. In contrast, private universities are too expensive for them.

4.2 Demand-Supply Mismatch

Presently, demands for higher education seats are far more than the supply. As many as 801,000 students, 422,000 boys and 379,000 girls, passed the Higher Secondary Certificate (HSC) and its equivalent exams in 2020. Of them, 37,969 achieved a GPA of 5 out of 5, while 2,16,000 scored between GPAs of 4 and 5. As against this potential demand for higher education seats, the supply of seats can be seen in Table 2.

Table 2: Total Seats for the Higher Studies in Bangladesh (Hon's or its equivalent Level)

	Name of University / Level of University	Seats
1	Public Universities	60, 000
2	Private Universities	203, 675
3	National University	87, 2 81
4	Islami Arabic University	60,000
5	Open University	77,756
6	International Universities	440
7	Medical and Dental Colleges	10, 500
8	Seven Colleges under Dhaka University	23,330
9	Four Engineering Colleges	7,206
10	Textile Colleges	720
11	Govt. and Private Nursing and Midwifery Colleges	5,600
12	Merin and Aeronautical Colleges	654
13	Institutions under DU and RU	3,500
14	Institutions under CU	290
Total		453,671

Source: Study Barta.com, University of Dhaka. <https://studybarta.com/public-and-private-universities-total-seats/> 3rd February 2021

Table 2 shows that there are only 60,000 seats in public universities. If the colleges and other public institutions are added, the total number adds up to 249,996 approximately. That means most students who score 80% will not be able to attend public universities. However, there are another 203,675 seats in the private universities. However, these universities are costly and not affordable to even most urban-based potential students, not to mention the rural candidates.

5. Public Policy on HRD in Bangladesh

The government of Bangladesh has adopted an appreciable public policy for human resource development. HRD has been included as one of the main goals of its development agenda and economic growth. To achieve this goal, the government has allocated 23.75 per cent of the budget in the fiscal year 2020-21 to HRD-related sectors, such as education and technology, health and family welfare, women and children, social welfare, youth and sports development, culture, labour, and employment. Various programs, including the 'National Education Policy 2010', have been undertaken to create skilled and competent Human Resources for the country by enhancing the quality of education and increasing accessibility to Secondary and Higher Secondary education, Technical, and all tiers of higher education. Besides, the government has emphasised female education. Due to the government's policy of recruiting 60 per cent of female teachers in the government primary schools, the number of female teachers has increased from 21.09 per cent in 1991 to 64.20 per cent in 2021.

The government has taken some positive initiatives to establish IT-based schools, colleges, universities, and madrasas to modernise the education system and ensure the massive expansion of technical education. The government has taken many national policies to increase women's participation in socio-economic activities and empower them by expanding female education. Arrangements were made to distribute stipends to the female students at secondary and higher secondary levels and extend financial assistance for purchasing books and paying fees (The Daily Star, 11 June 2010).

6. Covid-19 Experience of Education in Bangladesh

Covid-19 seriously affected the entire world, including Bangladesh, and all sectors of the economy, including education. In Bangladesh, when the first corona patient was detected on 8 March 2020, the educational institutions remained open, and the authority did not consider shutting down the educational institutions as an option. Instead, the government provided safety guidelines to combat the spread of COVID-19. Unfortunately, schools could not follow these instructions due to insufficient sanitation facilities, soap, or hand sanitiser. Hence, many teachers and parents proposed to shut down the educational institutions. Due to the increasing rates of coronavirus cases, students of 4 different departments of Dhaka University boycotted classes on 15 March. The Education Minister, Dipu Moni, declared that all the country's academic institutions would be closed until 31 March 2020. Despite

this, many coaching centres continued their operations. However, as the number of patients with COVID-19 increased, the deputy education minister on 7 April declared that holidays would be extended till the Eid holidays for all educational institutions. The government also started to broadcast the lessons for pre-primary students through “Ghore Bose Shikhi” (Learn while staying home) and later added secondary education (‘Amar Ghore Amar School’ on Sangsad Bangladesh Television from 29 March 2020) and higher secondary programs to enable students to get education en masse.

Online education remained the only viable alternative to face-to-face classes. Online classes were introduced in 15,676 out of 20,499 secondary schools and 700 out of 4,238 colleges. Approximately 2,909,844 online courses have been organised at the secondary and higher secondary levels. The students were evaluated based on their assignments without access to the conventional campus-based examination system.

For higher education at the universities, the University Grants Commission (UGC) provided guidelines and permission for online classes on 8 May 2020. The private universities were pioneers in adopting online education, although the public universities also tried to follow suit. It may be mentioned here that, among the private universities, the Asian University of Bangladesh (AUB) was better positioned to adopt the online education mode and did far better than all other universities in Bangladesh. It is because AUB received approval from the government to offer dual-modes of education from day one, from the 4 January 1996. Therefore, AUB introduced dual modes of education, namely campus-based and distance education (including online education). AUB had 18 centres nationwide to support online/distance education. The graduates of this mode of education are doing very well in the job market.

Covid-19 caused the forced introduction of online education across the board. Encouragingly, the government did not only provide permission and guidelines for online education during the Covid-19 pandemic, but the Government of Bangladesh has also provided online digital infrastructure by Bangladesh Research and Education Network (BdREN), which facilitated online education tremendously.

The Government initiated digitising higher education in Bangladesh through the Higher Education Quality Enhancement Project (HEQEP) in 2009. BdREN is an initiative of HEQEP, which began laying the foundations of digital infrastructure for higher education institutions by establishing high bandwidth and secure network connectivity at institutions. When UGC issued its directive for online education, BdREN responded by helping universities set up institutional accounts on Zoom, an online platform that gained popularity during the pandemic. They also helped teachers and university academicians with opening accounts, classroom management and assessment, and tips on making virtual classrooms more efficient. BdREN also set up a hotline to support students with network connection problems. Many students had returned to homes in rural areas, and it took a few weeks to iron out their difficulties in finding a suitable hot spot to study. For Bangladesh, this marks a

significant step forward as the digitisation of the higher education sector covers the way for further innovation. One hundred forty-seven out of the country's 153 public and private universities are receiving support from BdREN to teach online.

The positive feedback from universities has also led many primary and secondary schools to request their services. The critical role of BdREN in developing human capital and the increased demand for its services have convinced policymakers to invest more in the digital infrastructure of BdREN and the education sector. Bangladesh's Higher Education Acceleration and Transformation (HEAT) project will provide further support to the universities and the UGC to handle Covid-19 and invest in the digital infrastructure of the education sector. It will also enhance BdREN's capacity to support higher education institutions and ensure connectivity across the country's education and research institutions.

Thus the Covid-19 experience of Bangladesh presents a helpful insight for the provision of accessibility to higher education for HRD and economic development of the country through online education, given the rural bias and inaccessibility of higher education to potential rural-based knowledge seekers vis-à-vis the favourable public policy towards higher education, HRD and economic development of the country to be able to build Sonar Bangla.

7. A Case for Dual-Mode of Education: HRD in Bangladesh

What follows from the above is that a dual-mode of education is a logical imperative for rural-based economies, especially for Bangladesh, where the vast majority of the population lives in rural areas. Hence, they cannot afford city-based higher education since the universities providing higher education are located in major cities, implying a high cost of living. In this scenario, the only alternative is online (including its wider variety as distance education) mode side-by-side campus mode, known as dual-mode of education, since this provides an opportunity for higher education without physically travelling to the university campuses by staying where the knowledge seekers live. It is even more accurate in the case of Bangladesh. The benefits of a dual-mode of education and, especially, that of its online component are as follows.

Firstly, in general, the cost of online education is low and affordable. Due to the lower level of campus overheads and lower infrastructure needed to operate these programs, tuition fees are also standard. Besides, *transportation costs would also be considerably reduced*.

Secondly, the vast majority of the Bangladeshi population lives in rural areas. City-based education is not accessible to them, and they cannot afford to get higher education by moving to city-based universities. Thus it is impossible to cover the general masses of Bangladesh through campus-based education alone.

Thirdly, female education will be facilitated in Bangladesh, where female students are often victims of early marriage before completing their studies. It is a usual practice in Bangladesh that women get married at a relatively early

age. Attending university becomes highly challenging due to cultural and social pressures, especially when they have children. Distance/online learning can provide an excellent opportunity for them.

Fourthly, disabled students can comfortably get higher education by staying at home without accompanying relatives, which would be necessary in the case of campus-based education. With online education facilities, disabled people gain easy access to higher education and all educational materials in the comfort of their homes. The online set-up significantly removes the hassle of physical exhaustion for mobility-impaired students and shifts impossibility to possibility making their life easier.

Fifthly, service holders can continue their higher education while not leaving their employment postings. Otherwise, their opportunity cost will be unbearable if they need to go to their jobs for campus-based education. Demand for this kind of opportunity is high in Bangladesh. A micro example can be cited in support of this statement. In November 2021, after the government had ordered the reopening of campuses, some primary and secondary teachers of Khagrachhari district of Bangladesh visited the Asian University of Bangladesh with a request to continue the option of online education, who were availing of the online education facility during the Covid-19 period to complete their Master's degree, as they were unable to attend campus-based classes. Without distance/online learning options, they would be unable to continue their studies.

Finally, it is impossible to impart higher education to all the potential Bangladeshi students through campus-based education alone since seats on the university campuses do not match the number of knowledge seekers, as elaborated in Section 4 of this paper. Thus, the limited number of seats in the city-based universities cannot accommodate many knowledge seekers, even if they can afford this. Many students can avail of higher education only if an online alternative is available.

8. A Case for Dual-Mode of Education: Export of Education from Bangladesh

Many countries desire to increase their exports to the world market, including education services. There was a time when students from other countries came to Bangladesh for higher studies. For example, Malaysian students used to get degrees from Dhaka Medical College and other universities. Now Bangladeshi students go to Malaysia for higher studies. It is not that the quality of education in Bangladesh has gone down drastically.

On the other hand, Malaysian authorities supported efforts to export education to overseas countries. Online education in Bangladesh can help in this. There are good opportunities for such export of educational services in the case of Bangladesh as well. For example, there has already been a proposal to the Asian University of Bangladesh from one of the Arab countries to open an online/distance education centre since the children of Bangladeshi expatriates of that country are not allowed

to study in its national universities. Online/distance education will permit many students from other countries to get Bangladeshi degrees, which will increase the inflow of foreign remittance.

9. A Policy Proposal

Given the rural-based scenario of Bangladesh, where campus-based higher education is not accessible to the great majority of the potential knowledge seekers, a helpful insight of an alternative mode of education provided by the Covid-19 experience, and given the rationale presented above, the paper would like to propose “Dual Modes of Education for Bangladesh.” It will hopefully make higher education accessible to all potential students at an affordable cost, contributing to human resource development for building Sonar Bangla, a nation’s dream.

10. Some Concluding Remarks

1. Higher education contributes to human resource development (HRD), and HRD leads to economic development.
2. Higher education is not accessible and affordable to most knowledge seekers in Bangladesh since they live in rural areas outside the coverage of city-based campuses of private and public universities.
3. On top of this, Covid-19 affected all activities in Bangladesh, including the closure of educational institutions.
4. To overcome the Covid-19 effect on education, an alternative mode of online education was adopted as a substitute for campus-based face-to-face education, which was proven to connect the students even from the rural areas.
5. The educational experience of the Covid-19 period provided a helpful insight into an alternative method of HRD in Bangladesh, which may hopefully contribute to the provision of higher education in a situation whereby campus-based education is unable to do the same for all potential knowledge seekers. Thus Covid-19 may be treated as a blessing in disguise.
6. The policy suggests introducing dual modes of education in the country, face-to-face campus-based education and side-by-side online education, as is done in most the developed countries, where it is less desirable. It will need a suitable digital infrastructure and internet accessibility throughout the country.

11. Further Study

This study provides post-Covid-19 insight for dual modes of education. However, it does not go deep into the needed digital infrastructure, internet access, and effectiveness of online education in the status quo phenomenon. Further study will be required to examine the existing digital infrastructure needed for effective dual-mode instruction. However, the optimism is provided by the commitment of the government to develop a digital Bangladesh in a manner that both will go hand in hand.

References

- The World Bank in Bangladesh an overview on coronavirus response, November. 2021
- Abdun Noor. (1990). Education and Human Resources Development A comprehensive Approach from an Islamic Perspective. *Journal Islam Today* N° 13-1416H/1995.
- Aidit Ghazali. (1990). *Development: An Islamic Perspective*. Petaling Jaya, Selangor: Pelanduk Publications.
- Mushfika Akhter; The Role of Education in Human Resource Development in Bangladesh. *Banglavisision Research Journal* Vol. 15, No. 1, 2015.
- Asad and Amin. (2000). Human Resource Development in Bangladesh. *Dhaka University Business Journal*, p-100, p-101, p-103.
- Nath, J.; Chowdhury, A.F., & Nath, A.K. (2020). Analysing COVID-19 Challenges in Bangladesh. *Preprints 2020*, 2020070129 (doi: 10.20944/preprints202007.0129.v1).
- The Daily Star. More than a crore with no job and hope. <https://www.thedailystar.net/business/news/more-crore-no-job-and-hope-189855>.
- New Age Youth. The impact of COVID-19 on tourism and hospitality industry of Bangladesh. <https://www.newagebd.net/article/106347/the-impact-of-covid-19-in-tourism-and-hospitality-industry-of-bangladesh>.
- The Daily Star. Educational Institutions: Shutdown not in consideration yet. <https://www.thedailystar.net/frontpage/news/educational-institutions-shutdown-not-consideration-yet-1878151>.
- The Daily Star. Coronavirus Prevention: How prepared are schools? <https://www.thedailystar.net/frontpage/news/coronavirus-prevention-how-prepared-are-schools-1879912>.
- Daily Bangladesh. 4DU departments announce boycott over coronavirus panic. <https://www.dailybangladesh.com/english/4-DU-departments-announce%C2%A0boycott-over-coronavirus-panic/38694>.
- United News of Bangladesh. All educational institutions to remain closed till 31 March: Dipu Moni. <https://unb.com.bd/category/Bangladesh/coronavirus-bangladesh-shuts-down-educational-institutions/47157>.
- The Daily Star. Coaching centres open, defying govt directive. <https://www.thedailystar.net/city/news/coachingcentres-open-defying-govt-directive-1882801>.
- Definition of HRD (http://humanresources.about.com/od/glossary/h/hr_development.htm Accessed April 4, 2011).
- Moinuddin Ahmed Khan. (1990). *Political Crisis of the Present Age: Capitalism, Communism and What next?* Chittagong: BaitushSharaf Islamic Research Centre, p. 47.
- Reproductive Health and Rights are Fundamental for Sound Economic Development and Poverty Alleviation,” United Nations Population Fund. Retrieved 9 June 2009.
- Ansarey D. (2016), “Dropouts at the tertiary level in Bangladesh: A Case study in university of Bangladesh.”

- CDC Confirms Person-to-Person Spread of New Coronavirus in the United States - CDC Press Release, 30 January 2020
- Hossain BM. S. (2016) "Dropout at Tertiary Education in Bangladesh: Configurations and Determinant" Index Mundi, "Bangladesh Demographic Profile" 2021
- Khan et al. (2021). "Online Education System in Bangladesh during COVID-19 Pandemic." Impact of Digital Economy on Education, Middle East Business Magazine & News
- Khan et al. (2021). "Online Education System in Bangladesh during COVID-19 Pandemic" Scientific Research Publishing Inc.
- Prothom Alo Live Updates. Available at <https://www.prothomalo.com>; Accessed: 20 March 2020.
- Sarkar et al. (2021). "Perceptions of Public University Students Towards Online Classes During COVID-19 Pandemic in Bangladesh"
- Uddin, M. A. (2005). "Effect of Teenage Marriage on Dropout of Girl Students from High School in Bangladesh"
- World population review, 2021
- <https://www.cdc.gov/coronavirus/2019-ncov/about/index.html>. January 26, 2020; Accessed: January 27, 20
- <https://www.medscape.com/viewarticle/924596>. 30 January 2020; Accessed: 31 January 2020.
- Ansarey D. (2016). "Dropouts at the tertiary level in Bangladesh: A Case study in university of Bangladesh," CDC Confirms Person-to-Person Spread of New Coronavirus in the United States - CDC Press Release, 30 January 2020
- Bangladesh Economic Review 2021
- The Impact of COVID-19 on Human Resource Management Practices and Future Marketing, April 2021 International Journal of Industrial Marketing 6(1):43; DOI:10.5296/ijim.v6i1.17994
- Study Barta.com, University of Dhaka. <https://studybarta.com/public-and-private-universities-total-seats/> 3rd February 2021.
- Human resource management and the COVID-19 crisis: implications, challenges, opportunities, and future organisational directions, Published online by Cambridge University Press: **19 April 2021** Human Resource Management Practices in Bangladesh: Current Scenario and Future Challenges, December 2015
- South Asian Journal of Human Resources Management Vol 2(2):171-188; DOI:10.1177/2322093715599481
- Hossain BM. S. (2016) "Dropout at Tertiary Education in Bangladesh: Configurations and Determinant" Index Mundi, "Bangladesh Demographic Profile" 2021
- Khan et al., (2021)" Online Education System in Bangladesh during COVID-19 Pandemic." Impact of Digital Economy on Education, Middle East Business Magazine & News
- Khan et al. (2021), "Online Education System in Bangladesh during COVID-19 Pandemic", Scientific Research Publishing Inc.

ProthomAlo Live Updates. Available at <https://www.prothomalo.com>; Accessed: 20 March 2020.

Sarkaretal (2021). “Perceptions of Public University Students Towards Online Classes During COVID-19 Pandemic in Bangladesh”

Uddin, M. A. (2005) “Effect of Teenage Marriage on Dropout of Girl Students from High School in Bangladesh”

World population review, 2021 <https://www.worldometers.info/coronavirus/19>

<https://www.cdc.gov/coronavirus/2019-ncov/about/index.html>. January 26, 2020; Accessed: January 27, 20

<https://www.medscape.com/viewarticle/924596>. 30 January 2020; Accessed: 31 January 2020.