





Secondary and Higher Education Division
Ministry of Education

DIGITIZATION











"No investment is as vital for the healthy development of our society than investment in education"

Father of the Nation

Bangabandhu Sheikh Mujibur Rahman

Dreamer of Sonar Bangla



"We want to educate our new generation in such a way so that they can move keeping pace with the competitive world"

Honourable Prime Minister Sheikh Hasina

Dreamer of Digital Bangladesh

Digitization of Education System

The 'Vision 2021' outlined our government's flagship motto for a 'Digital Bangladesh' using Information and Communication Technology (ICT) in the fields of education, healthcare, and socioeconomic development. Education is key to the global integrated framework of sustainable development goals (SDGs). The goals of "Digital Bangladesh (Vision 2021)" in association with the SDG goals have been transformed into digital-governance initiatives of Secondary and Higher Education Division (SHED) under Ministry of Education to 'ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all by 2030'. Envisioning "Quality Education for All" pragmatic measures have been taken to integrate different streams of education by introducing compulsory ICT education at the Secondary and Higher Secondary level and also by establishing specialized science and technology universities to build skilled workforce suitable for 21st century. SHED has taken various online programs marking the birth centenary of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman who dreamt of 'Sonar Bangla' and envisaged the necessity of quality education for reaching a dignified position in the world.

Several initiatives introduced by SHED include multimedia classroom, digital contents of textbooks, ICT and language labs, e-learning sites to promote digital education in accelerating the SDG4 accomplishment. Many services in the education sector have been simplified through online including online information management, online admission, online payment system, online teacher recruitment, online survey and online training. SHED firmly believes that SDG4, otherwise known as Education 2030 agenda, would be achieved through the efficient uses of ICT with the spirit of Digital Bangladesh.

Secondary and Higher Education Division

(www.shed.gov.bd)





Directorate of Secondary and Higher Education

(www.dshe.gov.bd)

Directorate of Secondary and Higher Education (DSHE) is working towards providing educational facilities to Secondary and Higher Secondary Education level to achieve SDG4 focusing on quality education and improving equity of access. A strong integrated ICT system for Academic and Administrative Management as well as monitoring, mentoring and Teaching-Learning activities has already been developed. DSHE is now capable enough to serve its stakeholders more efficiently with transparency through Education Management Information System (EMIS).

1. e-Learning Activities

Amar Ghore Amar School (My School in My Home): During the closure of educational institutions due to the COVID-19 pandemic, DSHE has started distance education for the students of secondary level through Sangsad Bangladesh Television titled 'Amar Ghore Amar School'. Major subjects of class VI to X have been being broadcast since March 29, 2020. Students from remote areas can also participate online classes. These virtual classes remove the monotony of the students and can also be re-watched later through Youtube/Facebook.



- Online class: Educational Institutions are arranging online classes. Students have the opportunity to participate in these online classes.
- Online Teachers' Training: DSHE has taken initiatives for the teachers' training to enable them for taking on-line classes.
- ICT-Learning Centers: In 710 educational Institutions, ICT-Learning Centers have been set up which are used also acting as repositories of e-learning contents.
- Digital text books: 16 digital text books of class VI, e-manuals of 3 subjects (Physics, Chemistry and Bangladesh and Global Studies) and e-learning contents of 6 subjects (English, Mathematics, Accounting, Physics, Chemistry and Biology) for Class IX and X has been developed.
- e-Learning modules: For 6 subjects (Bangla, English, Mathematics, Science and Bangladesh and Global Studies) of class VII and VIII e-Learning modules have been developed.

2. Mujib Borsho (Mujib 100)

- Bangabandhu Sheikh Mujibur Rahman O Muktijuddho Ke Jani: On the birth centennial of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman, DSHE has organized a countrywide video documentary competition for the students of class VII as a part of their Continuous Assessment.
- Amar Mujib: Another nationwide program 'Amar Mujib', a competition on Drawing and Composition writing, has also been organized by DSHE for the Secondary and Higher Secondary level students under Ministry of Education. Measures have been taken to archive the selected contents digitally.

3. Scholarship through G2P Method:

Scholarship distribution system has been converted from traditional to digital. Now the students get scholarship directly to their bank accounts through G2P method from the fiscal year 2019-20.

4. Online MPO:

Salary and Allowance processing of about 3,50,000 (Three Hundred and Fifty Thousand) teachers & staffs working in about 19,000 (nineteen thousand) MPO enlisted non-government educational institutions (schools and colleges) across Bangladesh is done through Online MPO System (www.emis.gov.bd). Initiative has now been taken to disburse the payment through G2P method.

5. Online Monitoring:

- Online Performance Based Management (PBM) ensures accountability, monitoring and quality education.
- Mobile based Multi Media Classroom (MMC) App is used for real-time monitoring system to ensure quality class using multimedia.

6. Online Services to Teachers-Staff:

- EMIS based Services: PDS for BCS (General Education) Cadre officers, Gradation for Promotion of BCS (General Education) Cadre officers, Transfer applications, Joining / Release process and other ICT related works of different branches of DSHE are now accomplished through online. The EMIS processes and stores online all information of students, teachers, infrastructures, and land areas of about 22,000 educational institutions across Bangladesh.
- Services under one platform Eksheba: In Mujib Borsho DSHE has started rendering various services such as PRL-grant, sanction of GPF loan, provide financial power to DDOs, Rest and Recreation leave, Detention grant, Maternity leave approval to the stakeholders through Eksheba Platform (www.eksheba.gov.bd). Taking COVID-19 challenges in consideration, many other activities have been transformed to online services.

7. ICT in Education:

A total of 33285 Multimedia classrooms and 2306 ICT Labs have been established under DSHE. Another 46340 multimedia classrooms will be established in 31340 institutions.





ICT Training

Multimedia Classroom

- ICT training has been imparted to about 3,50,000 teachers and the same training has been planned for another 3,50,000 teachers.
- The posts of Assistant teachers (ICT) & Computer Lab Assistant have been created in Non-govt. Junior Secondary Schools.
- 255 Lecturer (ICT) posts have been created for Government colleges
- Admission activities of all government schools under DSHE are conducted through online.

DSHE is working relentlessly to face the challenges of the 21st century and to thrive confidently in Knowledge-based and technology-driven world.

Education Boards of Bangladesh



Education Boards of Bangladesh are mostly service-oriented organizations. Envisioning "Services@DoorSteps" and materializations of "Vision 2021" all boards are trying to ensure the delivery of quality services to the stakeholders through online. All boards are delivering almost all their services through

online application and e-file system. Admission in class XI, student registration in class VIII, IX and XI form fill-up for public examinations and result publications of J.S.C., S.S.C. and H.S.C. examinations of about 25 thousand secondary and higher secondary schools, colleges under different education boards are successfully accomplished through online.

Major e-Services





Indomitable Bangladesh in the Journey of Development Paperless Result Publications and Result Archiving (www.educationboardresults.gov.bd)

- Individual student results are published through online and SMS and Institutional results are published through website.
- Any stakeholder can check or Paperless Result Publishing verify their certificates or marks sheet through online.



 Universities are using the archived result data for the admission of Under-graduation level through API.



Online Admission System (www.xiclassadmission.gov.bd)

- Online Admission System in the Higher Secondary Level.
- Results of admission including merit list are published through online.
- Admission confirmation and Migration from one Institute to other Institute are being conducted through online.

NOW WE ARE PAPERLESS XI Class Admission

Student Registration through Electronic Student Information System (e-SIF) (erp.dhakaeducationboard.gov.bd)

- Educational institutions send student registration information through this online system.
- Online Registration of about 5 million students of class VIII, IX and XI.

Student Form Fill-up through Electronic Form Fill-up System (e-FF): (erp.dhakaeducationboard.gov.bd)

Online examination form fill-up for JSC, SSC and HSC level

Online Fees Payments

- Institute-wise payment through online banking as well as through mobile money transfer.
- Service-wise fees payment by the stakeholders through online banking as well as through mobile money transfer.

Online Application and e-file System: (efile.dhakaeducationboard.gov.bd)

- Institute recognition and permission for admitting students.
- Approval of different committees
- Opening of new group and subjects
- Student transfer from one institute to another (eTC)
- Name and Age correction
- Issuing duplicate documents
- Approval letters on the above issues through online.

Teacher's Information through e-TIF and Online Bill Payment:

- Collection of Teachers information through e-TIF
- Online appointment of examiners and disbursement of honorarium

Online Examination Centre Information System:

- Practical and Continuous Assessment marks submission by the exam centres
- Attendance and absence/expelled information of examinees of the respective centres
- · Daily examination reports are visible online



National Curriculum and Textbook Board (NCTB)

(www.nctb.gov.bd)

National Curriculum and Textbook Board (NCTB) is an autonomous organization responsible for developing curriculum, production and distribution of textbooks from pre-primary to Higher Secondary Level.

It focuses on digital interventions as follows:

- Prepare textbooks to e-books.
- Upload the e-textbooks at NCTB website to facilitate online access of textbook.
- Curriculum revision of all levels, based on 'National Education Policy 2010' and making available at the NCTB website. www.nctb.gov.bd
- Procurement of Textbook printing and distribution
- Online Textbook Demand Collection and Processing
- Online Monitoring of Textbook Printing, Receiving and Distribution



Bangladesh Bureau of Educational Information and Statistics (BANBEIS)

(www.banbeis.gov.bd)

BANBEIS is responsible for collection, compilation and dissemination of educational Information and Statistics through online system. It plays a vital role in spreading ICT Education at the Secondary and Higher Secondary level by establishing Upazila ICT Training and Resource Centre for Education (UITRCE) in 125 Upazila. It conducts research in education sector on contemporary issues.



Digital Multimedia Center

Digital multimedia center of BANBEIS develops and produces multimedia contents for the teachers of Secondary and Higher Secondary level.



e-Services of BANBEIS:

- e-Survey (Annual Online National Education Survey)
- National Education Database (NED)
- Online Interactive Database
- Online Educational Institutions Identification Number (EIIN)
- Foreign Scholarship Application
- Education GIS Apps (online and Offline)
- Shikkha Directory Apps.
- e-Clippings
- Digital Library
- Grants for Advanced Research in Education (GARE)
- Online Monitoring System
- Online Civil Registration and Vital Statistics (CRVS)

e-Survey:

 Conduct annual e-Survey to collect information directly from the educational institutions.

National Education Database (NED)

 Information collected through e-Survey is being stored in data warehouse which is an online Interactive Database.

Online EIIN Service (www.banbeis.gov.bd> Online EIIN):

Provide Educational Institution Identification Number (EIIN), a unique identity of institution, through online which saves Time, Cost and Visit (TCV) of the concerned institution.

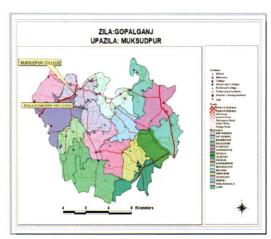
Online Foreign Scholarship processing

 Receiving of application and selection of candidates for higher education scholarship are processed digitally.

GIS Apps (School Mapping):

 Use of GIS Apps for school mapping by collecting geographical position value of educational institutions.





Shikkha Directory Apps:

- Mobile based 'Shikkha Directory' Apps containing contact number, name, designation and e-mail address of the officials of Ministries, Directorates, District and Upazila Offices as well as educational institutions.
- This apps can be used both off/online.

e-Clippings:

 All education related news from 10 selected daily newspapers are preserved online.

Digital Library:

 BANBEIS library is digitally managed and linked with the 10 prominent education institutions.

Grants for Advanced Research in Education (GARE):

 Funding for advanced education research under Ministry of Education is facilitated with transparency through a software(www.banbeis.gov.bd/gare)

M-monitoring:

• Mobile based software to collect data and to verify the presence of enumerator in the institutions.

Establishment of Integrated Educational Information Management System (IEIMS)

- Develop database relating to student profile based on Civil Registration and Vital Statistics (CRVS) and providing Unique ID for post-primary level students.
- Establish integrated information management system in education.
- Public exam result processing of all education boards and online result publishing.
- A comprehensive database of students profile based on CRVS secondary & higher secondary level.



Bangladesh National Commission for UNESCO (BNCU)

(www.bncu.gov.bd)



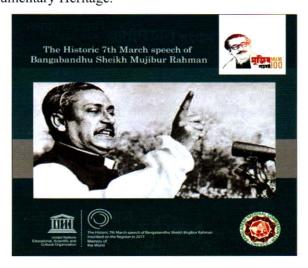
activities

inclusive education.

Bangladesh National Commission for UNESCO (BNCU) performs its duties in collaboration with UNESCO and ISESCO for developing bilateral and multilateral functions. It also maintains liaison by providing intellectual advices and also performs development in collaboration with concerned government. nongovernment organizations and with different NGOs and INGOs and the civil society. It has for long been contributing in the policy

Inclusion of Bangabandhu Sheikh Mujibur Rahman's Historic 7th March Speech in the Memory of the World International Register as a Documentary Heritage.

making and implementation of SDG4 and thus promoting quality &



Inscription of Bangabandhu's Historic 7th March Speech in the Memory of the World International Register by Ms Irina Bokova, the then Secretary General of UNESCO on 30 October 2017.

Inscription of World (Cultural & Natural) Heritages & Intangible Cultural Heritages

Through BNCU's relentless efforts the following resources of Bangladesh have been inscribed:

- Intangible Cultural Heritages: Baul Songs, Traditional Art of Jamdani Weaving, Mangal Shobhajatra on Pahela Baishakh, Traditional Art of Shital Pati Weaving of Sylhet
- World (Cultural & Natural) Heritage: Ruins of The Buddhist Vihara at Paharpur, Historic Mosque City of Bagerhat, The Sundarbans.

Promoting Distance Education

- BNCU with the support of the Islamic World Educational, Scientific and Cultural Organization (ICESCO) and MISK Foundation is providing a package kit of electronic devices including Laptop, Audio-visual Conference Cam, Noise Cancellation Microphone, Video Editing Software etc. to 39 educational institutions in Bangladesh
- The programme aims at enhancing the continuity of teaching & learning process by distance education and increase the capabilities & effectiveness of educational institutions in dealing with challenges caused by the COVID-19 Pandemic.







BNCU promoting Distance Education in association with ICESCO & MISK Foundation

Digital Facilitation of Award and Fellowship

 Channelisation of scholarships and awards for professionals and also for different individuals and organizations entirely through digital platform.

International Mother Language Institute (IMLI)

(www.imli.portal.gov.bd)



International Mother Language Institute (IMLI) was established under International Mother Language Institute Act 2010 aiming at documentation and preservation of languages, including those of ethnic

groups of different countries in the world. It conducts research on language movements concerning Bangla and other languages and disseminates such information in the member countries of UNESCO. IMLI has been awarded the prestigious recognition of a UNESCO Category-2 Institute in January 2



Hon'ble Prime Minister Sheikh Hasina at International Mother Language Day 2020

Establishment of Foreign Language Training Centre:

A foreign language training centre has been established to teach Bangla to the foreigners and provide foreign language training to all. The language training center is furnished with modern information technology like broadband internet facility, dedicated language learning software, interactive whiteboard, etc.

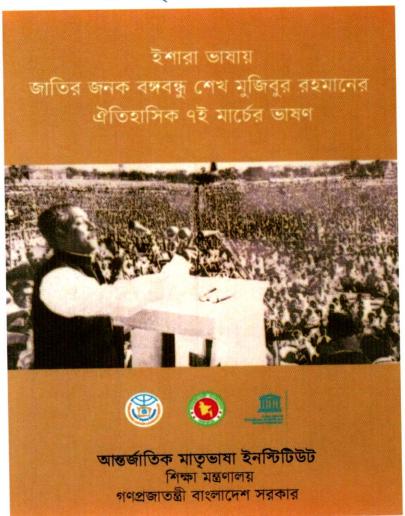


Archive for 'writing systems of the world' at IMLI

The Historic 7 March Speech (1971) and the Home Coming Speech (10 January 1972) of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman in Sign Language

A sign language publication of the Historic 7 March Speech of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman was brought out in 2019. With the backdrop of the Centennial Birth Anniversary of Bangabandhu, International Mother Language Institute has already completed the sign language publication of the Historic Home Coming Speech (10 January 1972) of the Father of the Nation. Both of these publications are available in DVD format. The aim of these publications is to acquaint the hearing impaired community of the country with these historic speeches of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman.

আন্তর্জাতিক মাতৃভাষা ইনস্টিটিউট (আমাই)



প্রকাশকাল: জানুয়ারি ২০১৯

Cover of the sign language publication of the Historic 7 March Speech of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman

Non-government Teachers' Registration & Certification Authority (NTRCA)

(www.ntrca.gov.bd)

Non-government Teachers' Registration & Certification Authority (NTRCA) is responsible for recruitment of efficient and competent teachers to increase overall standard of education. The transparent and merit based digital teacher recruitment process is a positive and revolutionary change in teacher recruitment system.

The key online services are-

- Combined merit list
- Certificate verification report
- Online application for participation in registration examination
- Online examiniees' data collection for update profile
- Verification of results
- Online collection of examinees' Admit paper, recommendation paper and joining letter
- Informing results to teachers' registration examinees through SMS
- e-requisition of vacancies from Non-govt educational institutions
- e-applications from qualified candidates against the vancancies
- Maintaining close contact with entry level teachers certified by the NTRCA through SMS as well as individual e-mail communication

Prime Minister's Education Assistance Trust (PMEAT)

(www.pmeat.portal.gov.bd)



Prime Minister's Education Assistance Trust (PMEAT) provides stipends to poor and meritorious students who are deprived of education due to lack of funds. Trust also provides admission assistance and financial grants to the students and offers fellowship and scholarship to

the M.Phil. and Ph.D. level students.

Digital Activities of Trust

'e-Stipend Management System' software has been developed to digitize the process of providing stipend to graduate and equivalent level poor and meritorious students. Main stakeholders of this system are students and Heads of Institutions (IH). In this system, stipends and tuition fees can be disbursed very quickly through the Electronic Funds Transfer Network (EFTN). URL: http://estipend.pmeat.gov.bd/



Hon'ble Prime Minister Sheikh Hasina inaugurated online stipend disbursement.

2. Harmonized Stipend Program

Stipends under the scheme is disbursed through G2P payment system. The stipend activities can be monitored through a dashboard incorporated in the system.

3. e-Financial Assistance and Grants System

- Trust distributes stipends as well as financial assistance to ensure admission of poor and meritorious students in educational institutions using e-Financial Assistance System (e-FAS).
- Poor and meritorious students who are seriously injured can get this service from e-Financial Grants System (e-FGS).

Directorate of Inspection and Audit (DIA)

(www.dia.gov.bd)

Directorate of Inspection and Audit works to improve the managerial quality of the educational administration and proper utilization of the Government fund of the educational institutions by ensuring transparency, accountability and compliance of Government's rules and regulations.

Automation software:

- Development of web-based automation system for the educational institutions and DIA for reducing the Time Cost and Visit (TCV)
- Automation of officer's work/travel schedule, Inspection and Audit form filling, addition of Inspection and Audit information, withdrawal of excess/illegal money by any teachers-employee.



Introduction Ceremony of Automation Software

Peer Inspection:

- To bring all the educational institutions of the country under annual inspection for monitoring and ensuring transparency and accountability.
- Piloted in 5 different organization of Dhaka Metropolitan Area.
- 36,695 educational institutions registered and 28,599 educational institutions' profiling completed.

National Academy for Educational Management (NAEM)



(www.naem.gov.bd)

NAEM is an apex training institution of Ministry of Education imparting training to the teachers and officers at post-primary level. It also conducts various research on different fields of education.

Digital Activities of NAEM

NAEM has started 5 online training courses for teachers and officers working in the education sector.

During the Covid-19 pandemic situation NAEM conducted in-house training on ICT Skills Development for faculty and staff.

Education Engineering Department (EED)

(www.eedmoe.gov.bd)

Education Engineering Department (EED) is responsible for construction and repair of educational institutions across the country. Recently it has taken an initiative to develop a database to upload and update the information of the educational institutions.

Digitalized Activities of EED:

Development of Database

Online progressive reports of the Development Projects.

Non-Government Teacher Employee Retirement Benefit Board

(www.terbb.gov.bd)

Non-Government Teacher Employee Retirement Benefit Board was established under the provision of Act-XXVII of 2002 and started its journey under the regulation of 'Non-Government Teacher Benefit-2005.' This board Retirement Employee employees teachers and the retirement benefit to Non-government Educational Institutions. The board is processing application through online and provides retirement benefit through BFTN to the respective Bank account of the beneficiaries.

Non-Government Teacher Employee Welfare Trust

(www.ngte-welfaretrust.gov.bd)

Non-Government Teacher Employee Welfare Trust was established under the provision of Non-Government Teacher Employee Welfare Trust Act-XXVIII of 1990. This trust provides welfare benefit to the teachers and employees of Non-government Educational Institutions. The Trust is processing application through online and provides welfare benefit through BFTN to the respective Bank account of the beneficiaries.

University Grants Commission of Bangladesh (UGC)

(www.ugc.gov.bd)



University Grants Commission of Bangladesh is an apex and statutory body in the field of higher education and research that works as a buffer institution between the government and the Universities by advising government in policy matters, allocating budget, ensuring quality education, encourage cutting-edge

innovative research and governance issues at higher educational institutions.

Digitization in Higher Education & Research Higher Education Management Information System (HEMIS)

The 'Higher Education Management Information System (HEMIS)' has been established for the information management of Universities at the National level.

The UGC Digital Library (UDL)

The UGC Digital Library (UDL) has been set up to provide access to modern knowledge to teachers, researchers and students of the University. Number of member



Institutions: 90 (Public University-34, Private University-51, International University-1, Training Institutes-2 and Research

Bangladesh Research and Education Network (BdREN)

• The Bangladesh Research and Education Network (BdREN) has been established to bring all the Universities across the country under one research network.

 BdREN provides services to 41 Institutions (35 Public University, 4 Private University, 2 International University).

- Connected to the education and research networks of other countries in the world through the 'Trans Euro-Asia Information Network (TEIN)'.
- Establishment of modern technology Campus Network in 35 Public Universities.
- Establishment of virtual classrooms in 35 Public Universities.
- ICT cell has been set up by BdREN in all Public Universities to manage the ICT related activities.

Digital Interventions

Robi and UGC signed a MoU to avail the affordable data package offer for university students.

■ Interest-free loan to 41,501 needy students of public universities for purchasing smart phones

Steps towards digitization of Higher Education Institutions

 Bangabandhu Sheikh Mujibur Rahman Digital University has been established to achieve the goal of digital Bangladesh.

 'Technology Transfer Offices' (TTOs) are being set up in universities to facilitate patenting.

■ 'Fabrication Labs' are being set up in Universities to encourage students and teachers in innovative activities.

 Policies introduced requiring all universities to go digital and to make teaching and learning activities accessible online-including admission.

■ American International University of Bangladesh (AIUB) launched a new Internet based ERP solution named 'Virtual University Expert Systems (VUES)' for the proper management of academic & administrative activities.

■ BRAČ University launched a new online learning platform named 'BuX' which enabled the continuation of learning and teaching through Covid-19 pandemic crisis.

■ United International University (UIU) established fully Automated Outcome Based Education using e-Learning Management System (eLMS).

 Bangladesh University of Professional (BUP) introduced Comprehensive Learning Management System (LMS), including E-proctoring and Turnitin Plagiarism Checker.



Bangladesh Accreditation Council

(www.bac.gov.bd)

The establishment of Bangladesh Accreditation Council (BAC) initiated a new era in the arena of higher education in attaining global standard for higher degrees. BAC has the responsibility to shepherd higher academic programs of general education, engineering, agricultural and medical science to achieve excellence. It has also the responsibility of accrediting higher education institutions and academic programmes for quality assurance in higher education.



Digital interventions by BAC

- Web enabled documents (Rules, Regulations and Policies) to support institutionalization of quality assurance (QA) culture within higher education industry.
- Online motivational workshop on QA and Accreditation.
- Virtual workshops on Accreditation Standards and Criteria with Vice Chancellors, IQAC Directors, Deans and Head of the departments of universities.
- Online training on Self-assessment (SA) and External Quality Assurance (EQA).
- Online orientation on National Qualification Framework (NQF) for Higher Education community.
- Online workshop on compliance with NQF and Accreditation Standards and Criteria.
- Online training workshop on QA and Accreditation for capacity building of IQACs of universities.



Launching of BAC Office



Virtual Consultation with Vice-Chancellors of Universities



Bangladesh Open University (BOU) - A Digital Platform

(www.bou.edu.bd)

Open TV

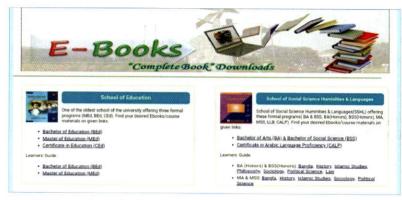


BOU is the only institution in Bangladesh for open education. BOU has launched an educational television called 'Open TV' to bring its own education and at the same time the education of any institution for the benefit of the students.

The experimental broadcast of Open TV is going on every day from 8 a.m. to 10 p.m. BOU has replaced all types of manual equipment and installed digital equipment for the new studio for 'Open Tv'. A satellite connection has been established and the test broadcast will continue till 31 December 2020. This step is a milestone in the implementation of digital education.

e-Books

BOU hosts the largest e-Book site in Bangladesh the BOU E-book site. Students can access the books from anywhere from their respective devices.



Digital Multimedia Centre

Recently a modern digital media centre has been established for recording and editing. This is a remarkable achievement in the field of digital education.



Online Student Admission and Payment (OSAP)

BOU has launched an Online Student Admission and Payment (OSAP). So, the students across the country can pay their fees online.

Learning Management System (LMS)

BOU has launched LMS for administering documentation, tracking, reporting, automation and delivery of educational courses.