DIGITAL INITIATIVES IN WEST BENGAL
Outline

1. AN OVERVIEW OF THE EDUCATION SYSTEM IN WEST BENGAL

2. KEY INITIATIVES IN DIGITAL EDUCATION

3. DIGITAL INITIATIVES TAKEN DURING COVID 19 PANDEMIC

4. GLIMPSES OF DIGITAL EDUCATION INITIATIVES

5. DIGITAL FACILITIES
AN OVERVIEW OF EDUCATION SYSTEM IN WEST BENGAL
## State Profile

<table>
<thead>
<tr>
<th>Management</th>
<th>2020-21</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percentage</td>
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<tr>
<td><strong>Schools</strong></td>
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<tr>
<td>Government</td>
<td>83484</td>
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<tr>
<td>Aided</td>
<td>87</td>
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<tr>
<td>Private</td>
<td>11687</td>
<td>12.3</td>
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<td><strong>Total</strong></td>
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<tr>
<td><strong>Enrolment</strong></td>
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<tr>
<td>Government</td>
<td>1,58,70,894</td>
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<tr>
<td>Aided</td>
<td>46595</td>
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<td>Private</td>
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<tr>
<td><strong>Total</strong></td>
<td>1,89,73,765</td>
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<tr>
<td><strong>Teachers</strong></td>
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<td></td>
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<tr>
<td>Government</td>
<td>4,69,804</td>
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<td>Aided</td>
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<td>Private</td>
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<td><strong>Total</strong></td>
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### Management-wise Number of Schools

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<tr>
<th>Management</th>
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<tr>
<td>School Education Dept.</td>
<td>63812</td>
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<td>SSK &amp; MSK</td>
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<tr>
<td>Other Govt</td>
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<td>Private</td>
<td>11687</td>
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<td><strong>Total</strong></td>
<td><strong>95258</strong></td>
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Management-wise Enrolment

<table>
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<th>Enrolment</th>
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<tr>
<td>School Education Dept.</td>
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<td>SSK &amp; MSK</td>
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<td>Other Govt</td>
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<td>Private</td>
<td>30,56,276</td>
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<td><strong>Total</strong></td>
<td><strong>1,89,73,765</strong></td>
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Medium-wise Number of Schools (All Management)

<table>
<thead>
<tr>
<th>Management</th>
<th>No. of Schools</th>
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<tbody>
<tr>
<td>Bengali</td>
<td>88368</td>
</tr>
<tr>
<td>English</td>
<td>2739</td>
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<td>Hindi</td>
<td>2211</td>
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<tr>
<td>Nepali</td>
<td>837</td>
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<tr>
<td>Odiya</td>
<td>43</td>
</tr>
<tr>
<td>Santhali (Considering multi-medium section)</td>
<td>393</td>
</tr>
<tr>
<td>Telugu</td>
<td>24</td>
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<tr>
<td>Urdu</td>
<td>828</td>
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## Level-wise infrastructure availability in schools (All Mgmt. Schools)

<table>
<thead>
<tr>
<th>Infrastructure</th>
<th>Primary</th>
<th>Upper Primary</th>
<th>Secondary</th>
<th>Higher Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Schools</td>
<td>75837</td>
<td>8731</td>
<td>3306</td>
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<tr>
<td>No. of Students (In mutually exclusive schools)</td>
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<tr>
<td>Boys</td>
<td>4207814</td>
<td>601086</td>
<td>544702</td>
<td>4286170</td>
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<tr>
<td>Girls</td>
<td>4002084</td>
<td>572872</td>
<td>707499</td>
<td>4483670</td>
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<tr>
<td>No. of Toilets Available</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>92129</td>
<td>13251</td>
<td>7600</td>
<td>26549</td>
</tr>
<tr>
<td>Girls</td>
<td>93352</td>
<td>14296</td>
<td>9873</td>
<td>31984</td>
</tr>
<tr>
<td>No. of Students per Toilet (National norms: 1:80 for Boys &amp; 1:40 for Girls)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boys</td>
<td>46</td>
<td>45</td>
<td>72</td>
<td>161</td>
</tr>
<tr>
<td>Girls</td>
<td>43</td>
<td>40</td>
<td>72</td>
<td>140</td>
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<tr>
<td>No. of Classrooms</td>
<td>336628</td>
<td>137177</td>
<td>50171</td>
<td>37399</td>
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<tr>
<td>SCR</td>
<td>26</td>
<td>43</td>
<td>58</td>
<td>52</td>
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<tr>
<td>No. of Schools with Drinking Water facility</td>
<td>75271</td>
<td>8674</td>
<td>3293</td>
<td>7377</td>
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<tr>
<td>No. of Schools with Electricity</td>
<td>73081</td>
<td>8340</td>
<td>3267</td>
<td>7375</td>
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<tr>
<td>No. of Schools with Boundary Wall</td>
<td>32857</td>
<td>3480</td>
<td>2573</td>
<td>6483</td>
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</table>
# Teachers in Position

<table>
<thead>
<tr>
<th>School Level</th>
<th>No. of Schools</th>
<th>Enrolment</th>
<th>No. of Teachers</th>
<th>Pupil Teacher Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Regular</td>
<td>Para/ Contractual</td>
</tr>
<tr>
<td>Primary (RTE Norms: 30:1)</td>
<td>50160</td>
<td>52,04,111</td>
<td>1,84,370</td>
<td>21,468</td>
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<tr>
<td>Upper Primary (including Model School &amp; NIGS) (RTE Norms: 35:1)</td>
<td>4698</td>
<td>49,87,378</td>
<td>1,45,768</td>
<td>24,889</td>
</tr>
<tr>
<td>Secondary (including Model School &amp; NIGS) (National Norms: 40:1)</td>
<td>2556</td>
<td>20,45,690</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Secondary (National Norms: 40:1)</td>
<td>6398</td>
<td>18,02,987</td>
<td>29,354</td>
<td>456</td>
</tr>
<tr>
<td>Model School</td>
<td>62</td>
<td>6,331</td>
<td>107</td>
<td>125</td>
</tr>
<tr>
<td>Integrated School</td>
<td>38</td>
<td>11,169</td>
<td>447</td>
<td>01</td>
</tr>
</tbody>
</table>
KEY INITIATIVES IN DIGITAL EDUCATION
KEY INITIATIVES BY STAKEHOLDERS IN DIGITAL EDUCATION

ADMINISTRATOR INITIATED

DIFFERENT DIGITAL INFRASTRUCTURE

CAPACITY BUILDING ON DIGITAL EDUCATION

DISTRIBUTION OF DEVICE

TEI / ORGANIZATION INITIATED

CONTENT CREATION AND CURATION

TEACHER TRAINING/ORIENTATION THROUGH ONLINE MODE

TV SLOTS FOR EDUCATION (ABP ANANDA AND ZEE 24 GHANTA)
BENEFICIARIES OF DIGITAL INITIATIVES

**ADMINISTRATOR ORIENTED**
- e – HRMS MOBILE APP
- M-PARIDARSHAN MOBILE APP
- MIDDAY MILL MOBILE APP (WBMDMs)
- SOCIAL MEDIA PLATFORM

**TEACHER ORIENTED**
- BANGLAR SIKSHA MOBILE APP
- UTSASHREE PORTAL

**STUDENT ORIENTED**
- BANGLAR SIKSHA MOBILE APP
- CAREER PORTAL
- STUDENT CREDIT CARD
- TARuner Swapna

**PARENT / COMMUNITY MEMBER ORIENTED**
- BANGLAR SIKSHA MOBILE APP
- VIRTUALLY CONNECTING TO PARENTS
Digital initiatives taken during COVID ‘19 Pandemic
Action taken for Addressing the Learning Loss of Children during Covid-19 Pandemic

1. Live Class Room in Television
   - Banglar Shiksha Classroom: Remote learning for the students of class VI to XII
   - Live telecast for all subjects on three leading Bengali News channels
   - Total 297 sessions conducted in 2021-22

2. Banglar Shiksha Durobhase (Support over telephone)
   - Dedicated toll free telephone number for classes V to XII
   - Students can connect to clear their doubts and receive guidance
   - A total of 4.9 Lakhs calls have been received during this period.
   - In order to overcome the problem of overcrowding the channel at a particular time, a class wise, subject wise time table has been prepared and communicated to the students through a process.

3. Teacher Training through online mode
   - More than 3 lakh Primary & Secondary level teachers trained using online platforms, by several organisations under the GoWB. (Data source Prabandh Portal)
4. Orientation on MCQ adaptation system
   - Orientation on adapting MCQ for students’ assessment of classes 3, 5, 8 & 10 conducted for regular classroom proceedings
   - These orientations were also taken up for preparing students appearing for National Achievement Survey (NAS).

5. Learning through Activity Tasks
   - This has been introduced with an aim to continue the uninterrupted learning process amongst the students of classes 1 to 10 for long stay at their home during COVID pandemic. They are being encouraged to carry out those tasks in subject based exercise book at their home. During their exercise, they can seek need-based help from their teachers on the one hand and also from their
6. Paray Shikhalaya
   - To support children to cope with school closure
   - Introduced teaching-learning session at community and habitation level by taking the school to the learners.
   - About 90 lakh children benefited through this effort.

7. Ujjiban Charcha
   - An initiative taken by SED and WBSHEC with the objective is to boost up the morals of the students, give them strength to cope up in a better way this pandemic situation, help them to pursue their dream in higher academic stages and empower the guardians and teachers to support the students in the best way they can. It is launched live on zoom platform, Facebook and YouTube and later archived in BanglarSiksha Portal.
   - More than 40,000 participants per webinar addressed at.
Action taken for Addressing the Learning Loss of Children during Covid-19 Pandemic (Contd)

8. Bridge Course Materials

- Specially designed Bridge course materials developed to facilitate students to cover learning loss
- Materials in all school subjects were made available for learners of classes 1 to 10.
- 84 Bridge Course materials developed under Accelerated Learning Package (Sikhan Setu)

9. E-learning materials on Banglar Siksha Portal:

A large number of e-learning material of all subjects for the student of Classes 5 to 12 in audio-visual form uploaded in e-portal i.e. banglarshiksha.gov.in (also accessible through YouTube) for continuity of the teaching learning process.
Banglar Shiksha Online

Banglar Shiksha classroom and Banglar Shiksha Junior classroom facilitated remote learning through live classes in television for the students of classes 5 to 12 in different subjects using three of leading news channels. Subject wise queries of students are being addressed and explained through toll free number during the live sessions by the expert teachers.

Classes for Madhyamik & Higher Secondary appearing students have been telecast live for entire weeks on two widely watched Bengali television channels, viz. News 18 Bangla and Zee-24 Ghanta.
Special arrangements of live classroom sessions

It has been made for examinee students of Madhyamik and Higher Secondary level for all subjects. Elaborative discussion of content, question patterns and how to answer the questions etc. are being explained on daily basis on the live classroom session. Moreover, model questions with answers are being uploaded in Bangla Shiksha portal.
Ujjiban Charcha

- Series of Webinars organized on weekends covering topics for extending academic and psychosocial support to Secondary and Higher Secondary level students have been conducted

- Viewership of 40-50 thousand per session achieved

Delivery Format

- Moderated discussion held with 2-3 experts from relevant fields
- Queries collected from the participants and the same addressed by the speakers during the webinar

Mode of transmission

Exemplar Topics

- ‘Covid Kale Shikkharthi Mon'
- ‘Projuktir Byabohar - shachetanata o sadhbanota’
- Importance of soft skills in life
- Use of technology in developing learning materials
- Inclusion of CWSN in Schools
- Astronomy - Origin, Concept & Scope
- Charm your way to success
Holistic Report Cards

- Report cards of students have been digitally generated on the School Management System under Banglar Shiksha.

- The report cards contain the details of the continuous and comprehensive evaluation of the student as have been conducted throughout the academic year.
**Taruner Swapno**: Providing financial assistance to the students of Class-XII

*Providing financial assistance to the students of Class-XII:*

- For procurement of Tablet/PC/Smart phone to facilitate uninterrupted continue studies in on-line mode a financial assistance at a rate of Rs. 10,000/- each was provided to 8.5 lakh students studying in Class-XII through this scheme.

- 110 numbers of Audio-visual materials of simulated class room and lecture sessions on 10 subjects for class XII have been provided through e-portal *Banglar Shiksha* and through social media.
The Career Portal provides comprehensive information for students in grades 9–12 on possible career options, choices for colleges, vocational institutions, entrance examinations and scholarships. It has been made to be dynamic and kept updated.

The portal has been organized so that a learner can look up for a career domain and find out the eligibility criteria, educational requirements, choice of colleges in different countries and states that offer the chosen programmes/courses, scholarships and fellowships available, different entry-points, if any, to that field and various growth prospects and options in that career domain.

Features

- Information on 555+ careers, 2.9 lac courses, 24000+ colleges, 1150+ entrance exams and 1200 scholarships
- All content available in multiple languages including Bengali, English, Hindi and others
GLIMPSES OF DIGITAL EDUCATION INITIATIVES
Digital Content Developed for Students

DIGITAL E-BOOKS

HIGHER SECONDARY

DEPARTMENT OF SCHOOL EDUCATION, WB

PRIMARY

UPPER PRIMARY/SECONDARY
Teacher Education in West Bengal at the Elementary Stage of School Education

• To address the issues of Teacher Education in the Elementary stage of school education, for Pre-Service Teacher Education (PSTE), the DIETs and PTTIs in West Bengal deliver D.EL.Ed. Programme as per NCTE norms, under the aegis of West Bengal Board of Primary Education (WBBPE).

• The SCERT(WB) has been entrusted by the competent authority with the academic and administrative responsibilities of DIETs from January, 2013 and for Govt./Sponsd./Aided PTTIs from January, 2022.
• The DIETs and PTTIs, imparting PSTE programmes, are spread in different districts all over the state of West Bengal.

• Among the DIETs, eighteen are Main campuses and ten Second campuses.

• Apart from the private ones, there are 43 PTTIs that are Govt./Sponsored/Aided, spread throughout the state.
Teacher Education in West Bengal at the Elementary Stage of School Education (contd.)

The In-Service Teacher Education (ISTE) Programmes for teachers in Elementary Stage of school education in West Bengal are imparted through several organisations under the overall auspices of Department of School Education, GoWB. These organisations are:

- SCERT (WB)
- DIETs
- Commissionerate of School Education, GoWB
- Paschim Banga Samagra Siksha Mission (PBSSM)
- NSATI, West Bengal
Online Initiatives on Teacher Training During Pandemic

• Online classes conducted on Google Meet for D.El.Ed. students in different DIETs during lockdown

• Online assessment through Google form.

• Creation of online repositories for pre-service teachers is in the process of being hosted in a suitable platform.

• Online orientation of in-service teachers on different topics like “School Leadership Development Programme” held during pandemic.
DIGITAL INFRASTRUCTURE
DIGITAL FACILITIES USED IN SCHOOL EDUCATION

• SCHOOL MANAGEMENT SYSTEM

• * BANGLAR SIKSHA PORTAL

• * UTSASHREE PORTAL

• * CAREER PORTAL

• ** VARIOUS SCHOLARSHIP PORTALS

* Source: https://banglarshiksha.gov.in/

** Source: https://scholarships.wbsed.gov.in/ , https://oasis.gov.in

SCHOOL MANAGEMENT SYSTEM

• The Integrated School Management System has been designed to interact mainly with six entities i.e. School Authority/HM, Students/Parents, Teachers, State Authority.

• The objective of the system is to develop an interactive, seamless, real-time, intra departmental communication framework for school level information dissemination.

• Application enables school authorities to manage day today activities of school efficiently.

• Supports login facilities to the Head of the Institutions, teaching and non teaching staff, students & guardians.

• Enables the user to monitor activities of the school like student attendance, academic planning, class routine, individual marks entry and progress report generation, student health information etc.

(https://school.banglarshiksha.gov.in)
REFERENCES

Information Source:

• Prabandh Portal ([http://samagrashiksha.in/](http://samagrashiksha.in/)),

• Banglar Siksha Portal ([https://banglarshiksha.gov.in/](https://banglarshiksha.gov.in/))

E-Books

• Primary(Amar boi):
  
  [https://banglarshiksha.gov.in/readwrite/etextbook/Amar%20Bai%20Class%20I.pdf](https://banglarshiksha.gov.in/readwrite/etextbook/Amar%20Bai%20Class%20I.pdf)

• Upper primary/Secondary(Poribesh O Bigyan Class-VIII):
  
  [https://banglarshiksha.gov.in/readwrite/etextbook/Poribesh%20O%20Bigyan%20Class%20VIII%20Bengali.pdf](https://banglarshiksha.gov.in/readwrite/etextbook/Poribesh%20O%20Bigyan%20Class%20VIII%20Bengali.pdf)

• Higher Secondary(Bengali Bhasa O Sanaskrity Class XI):
  
Online video links:

Class X English : https://www.youtube.com/watch?v=xhl7_ngRpH8

Class X Physics : https://www.youtube.com/watch?v=nhzQ0zu13oo&t=11s

Class X Mathematics: https://www.youtube.com/watch?v=L2rdGHRH1Pw

Child with special need: https://www.youtube.com/watch?v=bCnQBeazYz8&t=951s

Cyclone: https://www.youtube.com/watch?v=0kvmsAYz4Zw

Susama ghana bastur dharana (Class VI):
https://www.youtube.com/watch?v=X0_U54554Cw&t=83s

চৌবাচ্ছায় কত জল আছে দেখি (Class-VI): https://www.youtube.com/watch?v=8bNuaDZDEJQ
Thank you ... ... for your patient audience.