

Digital Revolution of Schooling in Assam: Shiksha Setu Axom





Department of School Education: Assam

Assam's Education Stakeholders

44,834 schools

48,66,005 students

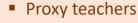
2,08,927 teachers

147 blocks

4,609 clusters

Issues faced by Education Department

Teachers



- Unauthorised absenteeism
- Subject-wise teacher availability
- Retirement projection and recruitment planning
- Time spent on Non- Academic works

Students

- Absenteeism
- Ghost students
- Drop out predictions and bringing them back to the system
- Issues faced during the transfer from one school to another

School

- Imbalance in PTR
- Teachers' utilisation status
- Probable Amalgamation
- Uniform grant and Free Textbook



Real-Time monitoring

- Lack of reliable and real-time data in public school system of Assam.
- Delayed identification of issues, lack of accountability



Solution





A comprehensive digital platform with **360-degree** information on Schools, Staff & Students.



Designed to serve as a **single source of information** for day-to- day administrative operations



Enabler for the department to take timely and datadriven decisions for optimization of resources and improve overall performance

Al-Based Attendance Tracking



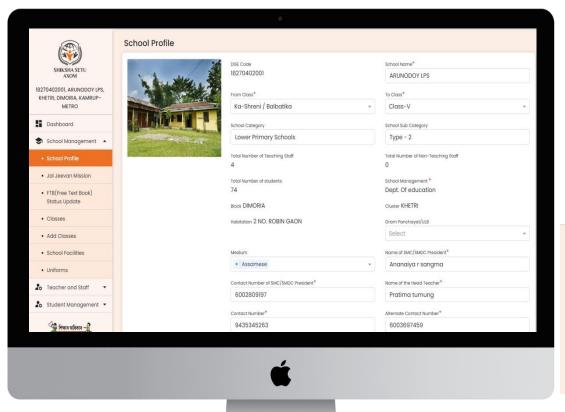






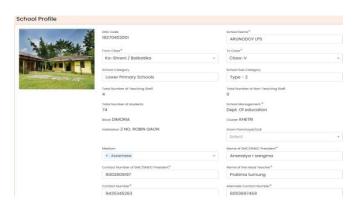
- Al based facial recognition technology
- Geo fencing
- Real Time (HH: MM: SS)
- Individual and Group attendance

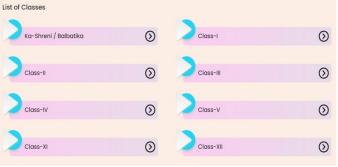
School Management



School Profile

School admin can **view and update** school profile details

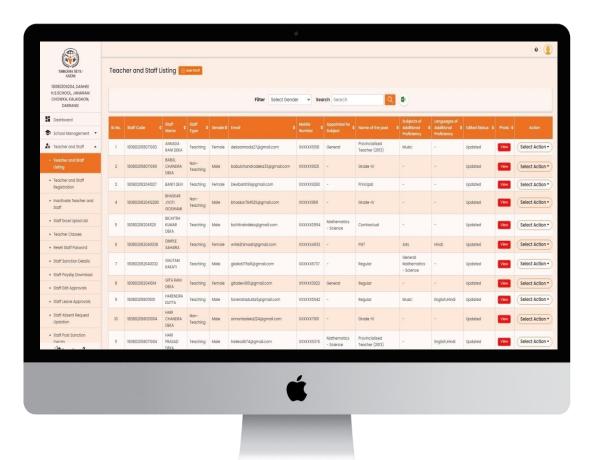




School Classes

School admin can view, create and update classes and associated sections

Teacher Management



Teacher Registration School admin can add new joiners / update details related to existing teachers





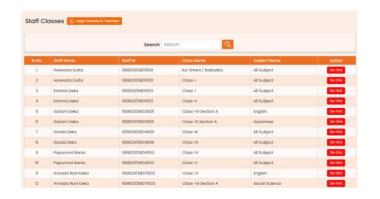
Teacher Details

Admin can view and do following activities

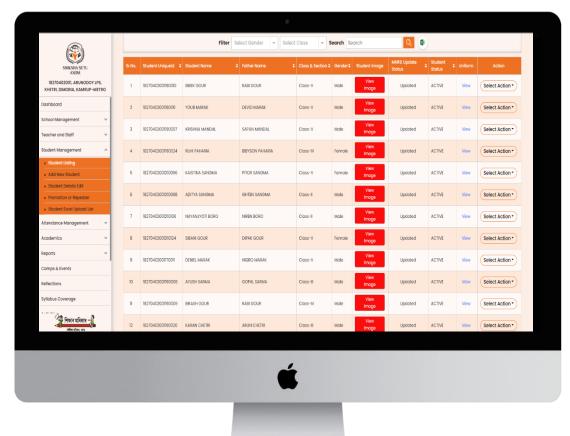
- School Update Teacher details
- District Teacher transfers

Teacher Subject Mapping

School admin can view and map classes and subjects to teachers

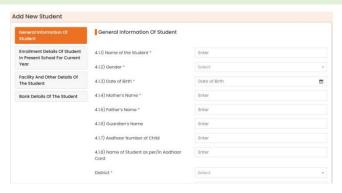


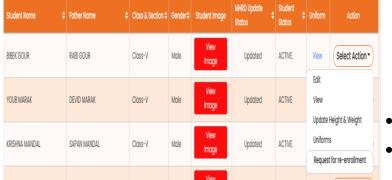
Student Management



Student Registration

School admin can do the registration of students with complete demographic data





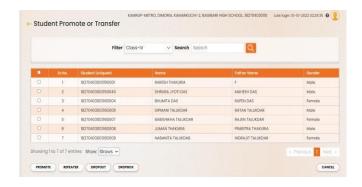
Student Updating

School admin can view and do following activities

- Student data update
- Student status update

Student Promotions & Transfers

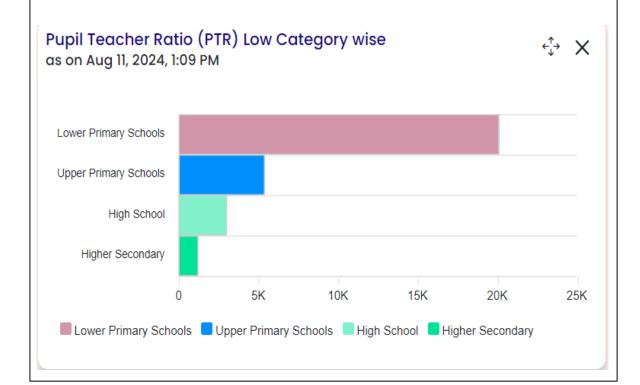
School admin can view and do the **student promotion** and transfer



Predictive Analysis

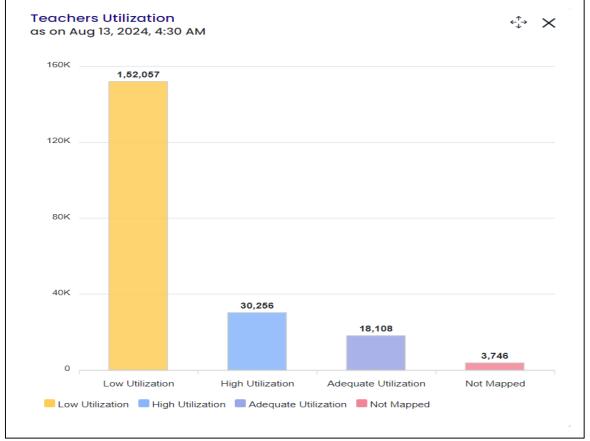
Pupil Teacher Ratio

- Schools PTR can be viewed for high and low PTR
- High PTR schools with neighbouring low PTR can be viewed

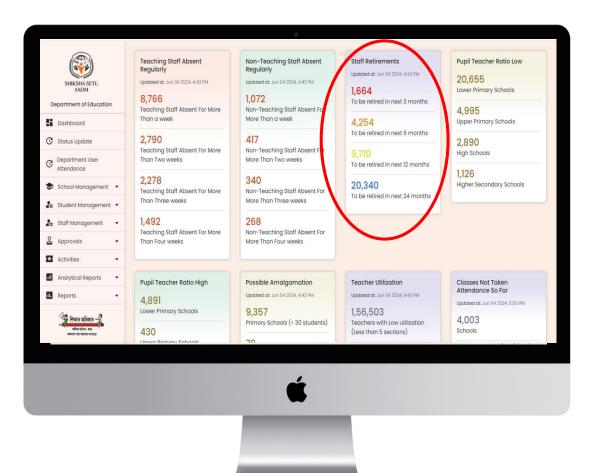


Teacher Utilization Analysis

 Teachers who are under utilized, adequately utilized and over utilized can be viewed based on subject & class mapping



Teacher Retirement Analysis



To be Retired in 3 Months

State/District user can view details of teachers who are to be retired in next 3 months



To be Retired in 6 Months

Predictive Analysis (To be Retired > Upto 3 Months)

State/District user can view details of teachers who are to be retired in next 6 months

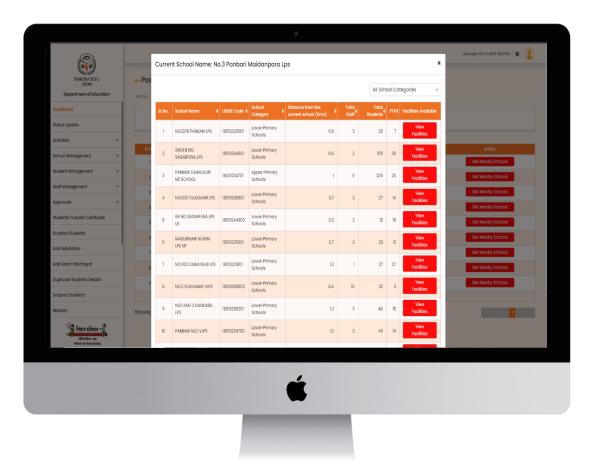
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State/District user can view details of teachers who are to be retired in next 12 months



Proposed Amalgamation Analysis



Proposed Primary Schools

State/District user can view number primary schools eligible / proposed for amalgamation due to low student count as defined



Nearby Schools for Amalgamation

State/District user can view nearby schools with which the proposed school can be amalgamated based on distance, student count and facilities



Proposed Non-Primary Schools

State/District user can view the number non-primary schools eligible / proposed for amalgamation due to low student count



Process Re-engineering

Online registry of Students, Teachers and Schools
Attendance: Al based Facial recognition attendance of 48 Lakh Students and 2.09 Lakh teachers – Save time, real-time information which can be viewed at all the level (State, District, Block, Cluster and School)
Online student transfer, transfer certificate and admission
Early detection of probable drop out which is difficult in manual process
Online leave management : Application, sanction and records
Timely notice to the teachers to be retired in next few months . It also reduces the court cases
Recruitment : Timely recruitment of category-wise teachers
Time saving: Reduces the time of teachers in non-academic works and focus more on academic works
Correct and real-time data-data driven decision making and planning
Identification of schools with High & Low PTR and rationalisation of teachers

Benefit 1: Al-based attendance

TEACHERS	 No more proxy attendance No more unauthorised absenteeism Teachers are not only coming to schools but coming in time "67% HTs report improvement in teacher attendance" (UNICEF study)
STUDENTS	 No more Ghost students (Around 4 Lakh ghost/duplicate students removed) Close monitoring of those students who are more than 1, 2, 3, 4 or more weeks absent Prediction of probable drop out and efforts to bring them back to schools
SCHOOLS	 Saving of Govt. exchequer on Free Textbook, Free Uniform, PM POSHAN etc.

Sr.No.	Staff Name \$	Photo	Mobile Number \$	Gender ≑	Al Enrollment \$	Attendance \$	Attendance Type \$	In-Time
Í	ANJU PATOWARY MEDHI		XXXXXX0865	Female	Yes	Present	Al Based	04-06-2024 08:33:04
2	APARUPA PAUL		XXXXXX3656	Female	Yes	Present	Al Based	04-06-2024 09:03:10
3	ASHMA KHANAM		XXXXXX0387	Female	Yes	Present	Al Based	04-06-2024 08:41:27
4	BABITA SAIKIA DAS		XXXXXX8052	Female	Yes	Present	Al Based	04-06-2024 08:51:40
5	BANTI BHATTACHARJYA		XXXXXX8579	Female	Yes	Present	Al Based	04-06-2024 09:00:47
6	BIJUMANI KALITA		XXXXXX6451	Female	Yes	Present	Al Based	04-06-2024 09:03:02

Benefit 2: School Management



Identification of teachers' utilisation status and proper utilisation of underutilised teachers



Identification of subject-wise teachers' availability



Uses of teachers' knowledge for **co-scholastic activities** like singing, dance, drawing, music etc.



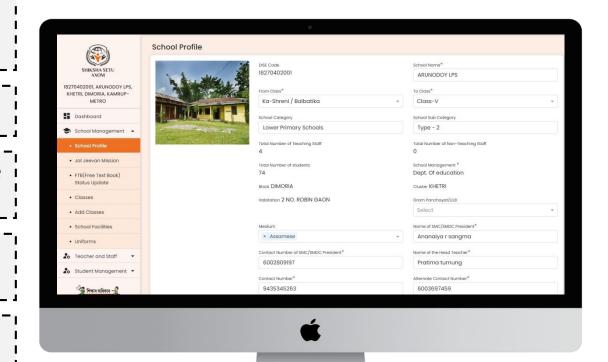
Identification of **probable amalgamation** of schools through PTR and Geo-Location



PTR based Teachers transfer



Teachers leave monitoring and over shooting of leave



Benefit 3: Students Dropbox



School **admin can move the students to Dropbox** after completion of highest class in the school or during transfers



No more requirement of Transfer Certificate



Students can take admission in any Govt/ Provincialized school across Assam



The student need to make an application to the HT of the school where he/she wants enrolment. Student details will be **pulled from Dropbox** and admission will happen instantly and hassle free

Benefit 4: Teachers



Online Leave sanction



Retirement intimation – 3 months, 6 months, 12 months and 24 months

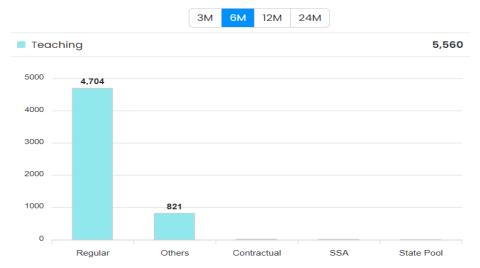


Timely recruitment by Government

	Student Unique Id	From Class	Name			
	18271107205220107	Class-V Section A	Purnima kalita			
	18271107205170011	Class-V Section A	Mausam Kalita			
	18271107205170014	Class-V Section A	Niharika Boro			
	18271107205170008	Class-V Section A	Minakshi Das			
	18271107205170012	Class-V Section A	Mayadevi Das			
	18271107205210075	Class-V Section A	Deepsikha das			
	18271107205210076	Class-V Section A	Pankaj saud			
	18271107205170006	Class-V Section A	Riyaz Das			
	18271107205170009	Class-V Section A	Mili Das			
	18271107205170010	Class-V Section A	Bhumika Rabha			
Showing 1 to 10 of 10 entries Show: 50rows >						
PULL THE STUDENTS						

Teaching Staff Retirements

as on Aug 1, 2024, 4:00 AM



←₁→ X

Benefit 5: Teachers Rationalisation



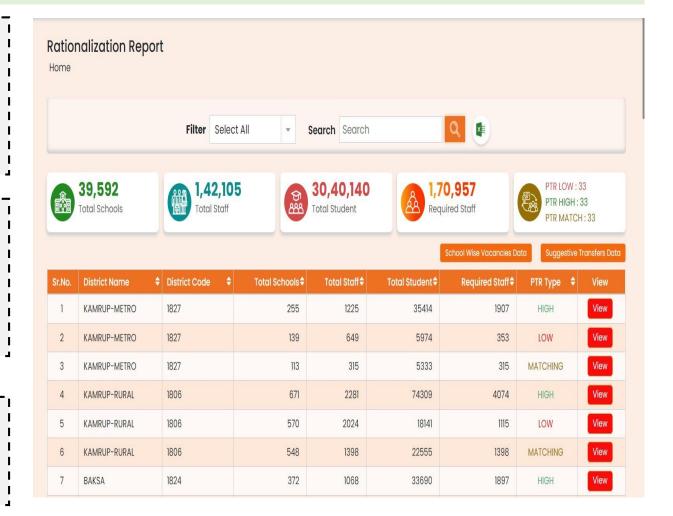
Technology-based comprehensive teacherrequirement planning. Shiksha Setu brings this vision to life in Assam by identifying Schools where teachers are needed based on PTR.



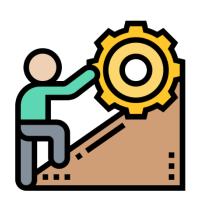
It assesses on the basis of criteria such as **proximity**, **teacher's age, TET qualified teacher** and **gender** (with a preference for male teachers) to determine potential transfers.



This ensures that the **right teachers are placed** where they are most needed, enhancing the quality of education across the State.



Challenges faced during implementation





Resistance from teachers to use their personal mobile



Lack of technical knowledge of teachers

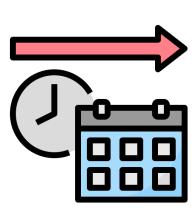


Technical glitches



Network issues in certain areas

Future Planning





Capturing the **service records of teachers** i.e., Digital Service Book



Requisition of **uniform** and **Free Textbook** by Schools

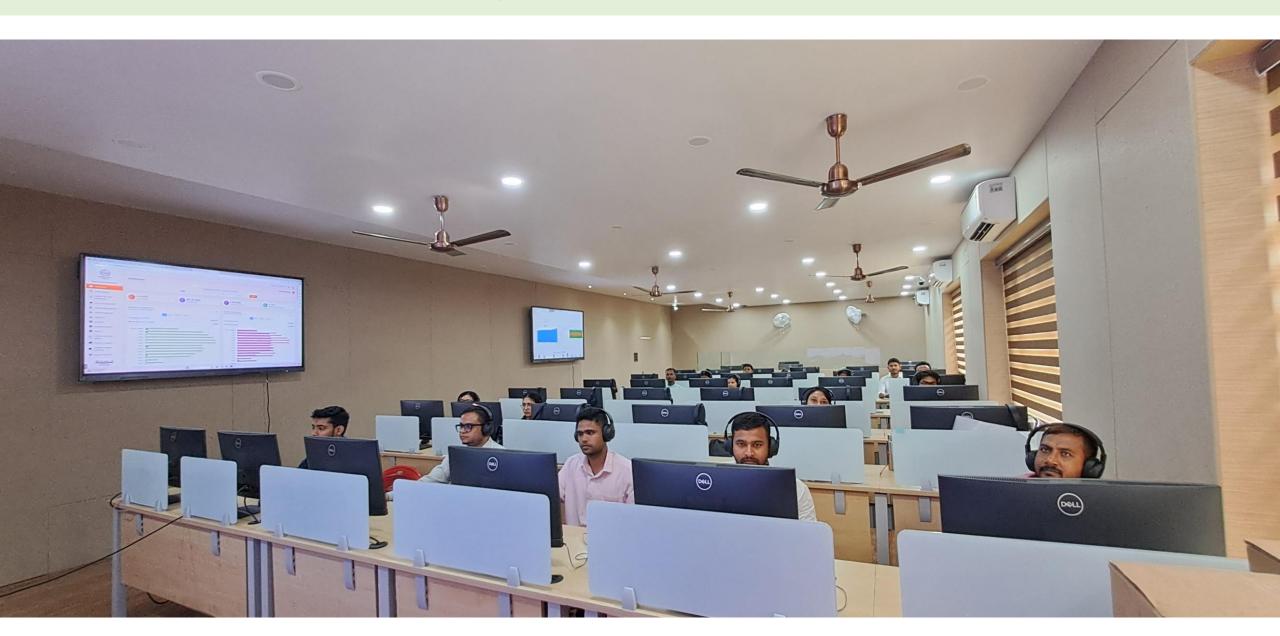


Monitoring progress of civil work at school level



Linking Mid-Day Meal and teacher's salary with Shiksha Setu.

Monitoring by Call Centre cum VSK



Thank You!