

# AI-Based Education Management Application

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## Problem Statement

The Indian education system faces challenges such as existence of dummy schools/colleges without proper teachers or students, lack of transparency in attendance of both students and teachers, poor monitoring of school/college performance, and difficulty in ensuring that government funds and scholarships reach genuine students.

## Objective

To design an AI-based Education Management Application that ensures:

1. Digital identity for every student, teacher, and institution.
2. Automated attendance tracking using AI-based facial recognition.
3. School/college performance analysis (exam results, teacher quality, infrastructure).
4. AI-based fraud detection to eliminate dummy schools, duplicate students, or fake certificates.
5. A transparent scholarship and fund distribution system.

## Methodology

1. Data Collection: Student & teacher profiles with Aadhaar/unique ID; Attendance records, exam results, and school history.
2. AI Analysis: Facial recognition for real-time attendance; Predictive analytics for student performance; Fraud detection for fake schools or duplicate entries.
3. Transparency Layer: Blockchain for storing student/teacher records; Open dashboards for parents, teachers, and government.
4. User Application: Mobile & web-based app for parents, teachers, and government officials; Students/parents can track progress, scholarships, and attendance anytime.

## Futuristic Features

- AI Virtual Teachers for shortage of staff in rural areas.
- Performance Prediction: AI predicts which students need extra support.
- National Education Cloud: Data of every student across India stored securely, enabling seamless transfers and monitoring.
- Integration with NEP 2020 for personalized learning.

## Expected Impact

- Elimination of dummy schools and fake certificates.
- Better transparency in education records.
- Improved student performance tracking.
- Trust building between parents, schools, and government.
- Supports India's vision of Digital Education 2030.