

# EDUCATIONAL ORGANIZATION USING SERVICENOW

## Abstract

The "Educational Organisation Using ServiceNow" project is a comprehensive initiative aimed at automating and optimizing the academic and administrative operations of an educational institution. Built on the robust and flexible ServiceNow platform, this project leverages custom applications to manage student admissions, store and retrieve academic records, and monitor student progress.

This system eliminates the need for paper-based processing and reduces human error by integrating automation at various levels of the educational workflow. It ensures a more reliable, transparent, and user-friendly interface for both administrators and students. The project highlights how low-code development using ServiceNow can extend to industries beyond IT Service Management, offering a scalable framework tailored to the needs of educational ecosystems.

## Problem Statement

Educational institutions often suffer from inefficient data handling, fragmented processes, and lack of automation, especially in managing student records, admissions, and academic performance tracking. These challenges lead to delays, inconsistent data entry, and loss of productivity.

Manual admission processes, disconnected record systems, and error-prone calculations affect decision-making and academic integrity. This project addresses these issues by building a centralized, automated solution using ServiceNow that enhances operational efficiency, data integrity, and overall decision-making in educational institutions.

## Objectives

- Design a modular and scalable Educational Management System using ServiceNow
- Digitize and automate the student admission process
- Enable real-time calculation of student academic progress

- Improve user experience using dynamic forms and auto-population
- Maintain and organize data using custom tables, views, and layouts
- Enhance transparency and traceability using Process Flows
- Reduce human error with automated field calculations and validations

## **Tools and Technologies Used**

- ServiceNow Personal Developer Instance
- Form Designer & Table Configuration
- Client Scripts (JavaScript)
- Business Rules and UI Policies
- Process Flow Designer
- Number Maintenance Module
- Local Update Sets
- ServiceNow Studio (for Application Scoping)

## **System Modules and Functionalities**

### **1. Salesforce Table – Student Core Data**

Includes:

- Admin Number (Auto-generated and unique)
- Student Name, Grade
- Father's and Mother's Name
- Contact Numbers for Parents
- Admission Date

**Key configuration:**

- Table is extensible
- Admin Number is display field and auto-generated using Number Maintenance
- Well-organized form layout with logical groupings

## **2. Admission Table – Handling Student Enrollment**

Extends the Salesforce table and includes:

- Admission Status
- Purpose of Joining
- Pincode
- Mandal, City, District (Auto-filled based on Pincode)
- School Name, School Area

### **Additional Configurations:**

- Choice lists for School, Area, and Status
- Auto-filled fields based on Admission Number
- Pincode logic to auto-update location
- Process Flow for visualizing admission stages

## **3. Student Progress Table – Academic Tracking**

Includes:

- Marks in Telugu, Hindi, English, Maths, Science, Social
- Automatically computed total marks
- Percentage
- Result status (Pass/Fail)

### **Key Functionalities:**

- Client scripts calculate Total, Percentage, and Result
- Fields are disabled to prevent manual input
- Clean form layout for review

## **Configuration Activities**

### **Instance Setup**

1. Created an account at [developer.servicenow.com](https://developer.servicenow.com)
2. Requested and launched a Personal Developer Instance
3. Logged in and configured environment, scopes, and access

### **Update Set Creation**

- Named: **Educational Organisation**
- Tracked all table, script, flow, and form modifications

### **Table Configuration**

- Core tables: Salesforce, Admission, Student Progress
- Admission and Student Progress extend from Salesforce
- Application Menu configured for quick access

### **Form Design**

- Used Form Designer to group fields logically
- Customized section headers
- Implemented dynamic visibility and mobile responsiveness

### **Number Maintenance**

- Auto-numbering for Admin Number
- Used custom padded ID for uniqueness

### **Process Flow Designer**

- Stages: New → InProgress → Joined → Rejected → Rejoined → Closed → Cancelled
- Visual flow editor used for transitions
- Improves traceability of student status

## **Client Script Implementations**

### **A. Auto-Populate Student Details (Admission Table)**

- Trigger: When Admin Number is selected
- Action: Fetches details from Salesforce
- Locks fields to prevent editing

#### **B. Location Autofill Based on Pincode**

- Trigger: Pincode entry
- Action: Fills Mandal, City, and District
- Based on preconfigured lookup logic

#### **C. Disable Calculation Fields (Progress Table)**

- Trigger: On form load
- Action: Disables Total, Percentage, Result fields

#### **D. Total Marks Calculation**

- Trigger: onChange of subject marks
- Action: Adds 6 subjects and updates Total field

#### **E. Percentage Calculation**

- Trigger: onChange of Total
- Action:  $(\text{Total} / 600) \times 100$

#### **F. Result Calculation**

- Trigger: onChange of Percentage
- Action:
  - If  $<60 \rightarrow$  Fail
  - Else  $\rightarrow$  Pass
  - Shows error if % not in 0–100

### **Outcomes and Benefits**

- **Streamlined Admissions:** Fewer manual steps using workflows

- **Accurate Reports:** Automated grade calculations
- **Responsive Forms:** User-driven inputs and reactions
- **Data Quality:** Validation and field locking
- **Administrative Oversight:** Status visibility with Process Flows
- **Future Ready:** Easy to extend for faculty, fees, exams

## Conclusion

The project demonstrates how ServiceNow can build scalable, fully functional applications beyond IT use cases. Automating repetitive tasks, ensuring data integrity, and offering modern UI/UX, the system creates a smart approach to education management. Suitable for schools, colleges, and training institutes, this solution can drive digital transformation.

## Future Enhancements

- Email & SMS notifications for admission updates
- Mobile app integration for real-time status
- Visual dashboards with filters for Admins & Teachers
- Faculty module for class, subject, and attendance
- Fee Management & Transaction History
- Exam Result and Certificate Portals
- LMS Integration (e.g., Moodle, Google Classroom)