

Student Performance Dashboard

Project Summary & Insights

Project Overview

The **Student Performance Dashboard** is an interactive Power BI solution designed to analyze **academic performance, attendance, and behavioral patterns** of students across **classes, sections, subjects, and terms**.

The dashboard follows a **two-page analytical structure**:

1. **Student Data Analyzer** – High-level, comparative insights
2. **Student Profile** – Individual student deep-dive analysis

It supports **desktop and mobile layouts**, ensuring accessibility and decision-making on any device.

Page 1: Student Data Analyzer – Summary

Key KPIs (Top Cards)

- **Total Students:** ~1K
- **Average Attendance:** 90%
- **Average Score per Student:** 50%

→ Indicates **strong attendance discipline**, but **moderate academic performance**, signaling scope for academic improvement.

Performance Trend by Term

- Multi-line chart showing **score trends across Term 1, Term 2, and Term 3**
- Segmented by **Class (1–12)**

Key Observation:

- Performance remains **largely stable** across terms
 - Minor fluctuations suggest **no drastic academic improvement or decline**
 - Some classes peak in specific terms, indicating **term-dependent effectiveness**
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Class, Subject & Section Slicers

- **Class slicer (1–12)**
- **Term slicer (Term 1–3)**

- **Section slicer (A, B, C)**
- **Subject slicer**

→ Enables **dynamic drill-down analysis**, allowing stakeholders to isolate performance drivers.

Behavior Type Distribution

Behavior categories include:

- Disruptive
- Late
- Helpful
- Participative
- Absent Without Reason

Insight:

- Behavior distribution is **nearly balanced (~20% each)**
- Indicates **diverse classroom behavior**, with no single dominant issue
- Helps schools target **behavior-specific interventions**

Average Score by Subject and Class

- Horizontal bar chart
- Subjects: **Math, Science, English, History, Geography**

Insight:

- **Math, Science, and English** show relatively higher averages
- **History & Geography** slightly lag behind
- Subject-wise variation suggests **curriculum or teaching methodology gaps**

Student-wise Performance Table

- Student Name
- Subject
- Score %
- Performance Category (Low / Medium / High)

Key Insight:

- Majority of students fall into “**Medium**” performance
 - Few high performers → **opportunity for academic excellence programs**
 - Useful for **teacher-level monitoring and counseling**
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Page 2: Student Profile – Summary

This page focuses on **individual student analysis**.**Student Identification Card**

- Displays **selected student name**
 - Automatically updates via slicers
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Attendance % by Year

- Line chart (2024 → 2025)

Insight:

- Attendance improves year-over-year
 - Suggests **better engagement or policy effectiveness**
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Score % by Subject (Individual Student)

- Bar chart for selected student

Insight:

- Highlights **subject strengths and weaknesses**
 - Example pattern observed:
 - Strong in **English / Math**
 - Weaker in **History / Geography**
 - Useful for **personalized academic guidance**
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Mobile Optimization Insight

- Vertical stacking of visuals
- KPI cards prioritized at top
- Slicers converted to **touch-friendly tiles**

- Maintains **full analytical power on mobile**
- Demonstrates **real-world Power BI deployment readiness**
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Overall Analytical Insights

Strengths

- High attendance consistency
- Well-structured multi-dimensional filtering
- Balanced behavioral distribution
- Scalable design for large student datasets

Improvement Areas

- Average academic scores indicate **learning gaps**
 - Few top performers → need **advanced learning tracks**
 - Subject-specific underperformance requires **targeted teaching strategies**
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Business / Academic Value

This dashboard enables:

- **School administrators** → monitor overall academic health
 - **Teachers** → identify weak subjects & students
 - **Counselors** → correlate behavior with performance
 - **Students & parents** → track personal progress
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Final Evaluation (Exam / Interview Perspective)

- ✓ Proper KPI design
- ✓ Clean visual hierarchy
- ✓ Meaningful slicers
- ✓ Individual + aggregate analysis
- ✓ Mobile responsiveness
- ✓ Real-world educational use case



