

## STUDENT PERFORMANCE PROJECT – INSIGHTS & ANALYSIS

Below is a complete set of insights based on how your data model works and the measures you calculated. I've organized them into categories for clarity:

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### 1. OVERALL STUDENT PERFORMANCE INSIGHTS

#### ✓ Total Students

You calculated this using:

Total Students = `DISTINCTCOUNT(Students[StudentID])`

This gives the exact number of unique students in the dataset.

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#### ✓ Overall Average Performance

Using your measures:

- Total Score
- Total Max Score
- Percentage Score

You are able to identify:

- ★ Average student score across all subjects and terms
  - ★ Top performing subjects
  - ★ Low performing subjects
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#### ✓ Performance Categories

Using the DAX:

Performance Category =

```
SWITCH(  
    TRUE(),  
    [Percentage Score] >= 0.80, "High",  
    [Percentage Score] >= 0.50, "Medium",  
    "Low"  
)
```

You classified students into:

- High performers (80% and above)
- Medium performers (50–79%)

- **Low performers (below 50%)**
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## **2. SUBJECT-WISE INSIGHTS**

With **Average Score per Subject**, you can identify:

### **Best-scoring subjects**

Subjects where students perform consistently well.

### **Lowest-scoring subjects**

These may require:

- Teaching method improvement
  - Additional practice sessions
  - Extra support for students
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## **3. TOP STUDENT INSIGHTS**

You created measures to identify:

### **Top Student Name**

Using:

Top Student Name = ...

### **Top Student Total Score**

Using:





Top Student Total Score = ...

### **Top Student Percentage Score**

Using:

Top Student % Score = ...

This provides insights such as:

-  Who is the best-performing student
  -  Their percentage score
  -  Their total marks obtained
  -  Their performance trend over terms
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## **4. ATTENDANCE INSIGHTS**

Using the measure:

Attendance % = ...

You can analyze:

### ✓ **Overall Attendance Rate**

Shows how consistent students are in attending classes.

### ✓ **Student-wise Attendance Trends**

- Students with high attendance
- Students with low attendance (risk students)

### ✓ **Monthly Attendance Patterns**

Detect trends like:

- Drops during exams
  - Improved attendance after holidays
  - Days with maximum absences
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## **5. BEHAVIORAL INSIGHTS**

From the **Behavior Count** and **Behavior Count per Type**, you can identify:

### ✓ **Types of behavior issues recorded**

Examples:

- Disruptive
- Late
- Absent without reason
- Positive behavior

### ✓ **Students with frequent behavior incidents**

These may require:

- Counseling
- Parent communication
- Learning behavior support

### ✓ **Positive behavior patterns**

Highlight students demonstrating:

- Leadership
  - Participation
  - Good discipline
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## **6. CLASS & SECTION INSIGHTS**

With slicers added:

- Class
- Section
- Subject
- Term

You can compare performance across:

✓ **Class-wise average score**

Which class performs best?

✓ **Section-wise performance**

Any section that needs attention?

✓ **Gender-wise performance**

Are there performance gaps between boys and girls?

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📌 **7. TREND INSIGHTS**

Using the line chart for score trend:

✓ **Score improvement or decline over terms**

Identify if students are improving or dropping.

✓ **Term-wise performance comparison**

Term 1 vs Term 2 vs Term 3 trends.

✓ **Subject trend comparison**

Some subjects may show consistent growth or decline.

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📌 **8. DASHBOARD INTERACTION INSIGHTS**

Your Power BI project supports:

★ **Drillthrough**

Clicking a student shows:

- Their score trend
- Their attendance trend
- Their behavior records

★ **Tooltips**

Hovering displays:

- Mini score trend

- Mini attendance chart
- Student-specific information

### ★ Filters and Slicers

Users can slice by:

- Term
  - Subject
  - Class
  - Section
  - Behavior Type
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## 📌 9. RISK IDENTIFICATION INSIGHTS

Your dashboard can identify **at-risk students**:

### ● Low Percentage Score

Students below 50% need academic support.

### ● Low attendance

Students with attendance < 70% may struggle in learning.

### ● High behavior incidents

Students showing frequent negative behavior patterns may need intervention.

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## 📌 10. KEY TAKEAWAYS SUMMARY

Here is a neat summary you can include in your project:

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### ✓ Top Students Identified

High-performing students based on total and percentage score.

### ✓ Subjects Performance Visualized

Clear view of strong and weak subjects.

### ✓ Attendance Trends Monitored

Shows consistency and risk patterns.

### ✓ Behavior Analysis Included

Tracks behavior incidents by type and frequency.

### ✓ Interactive Dashboard

Drillthrough, slicers, tooltips, and filters enhance usability.

### ✓ **Student Performance Classification**

High, Medium, and Low categories for quick insight.