

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:

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.

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?

 **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.

 **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.

10. KEY TAKEAWAYS SUMMARY

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

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.