

Students

Pre Analysis

In Analysis

Insights



# Reggie's Students Academic Performance Report

4,000

Total Students

75.22

Average Attendance(%)

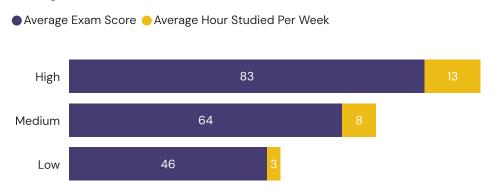
9.86

Average Hour Studied Per Week

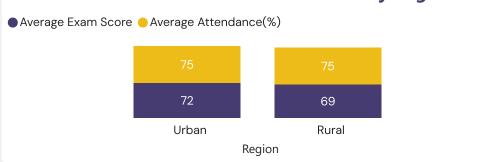
71.11

Average Exam Score

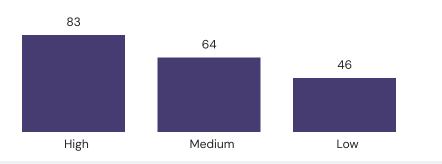




### **Influence of Exam Score and Attendance By Region**



## **Average Exam Score by Study Category**



### **Total Students by Gender and Performance Category**





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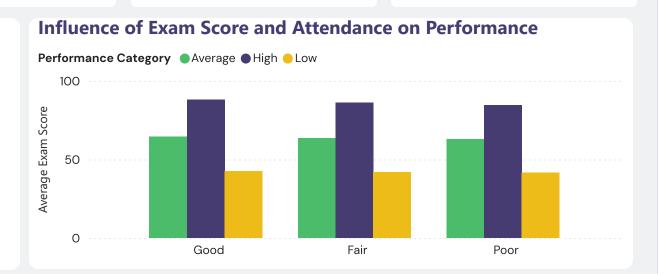
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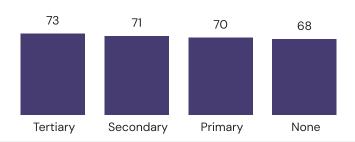
71.11

Average Exam Score

Region	Gender	Tutoring	Average Exam Score ▼
Urban	Female	Yes	82.13
Urban	Male	Yes	81.63
Rural	Female	Yes	80.59
Rural	Male	Yes	78.93
Urban	Female	No	<b>69</b> .46
Urban	Male	No	66.92
Rural	Female	No	64.40
Rural	Male	No	64.21













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## **Pre Analysis Board**

#### **Project Objective**

The objective of this analysis is to evaluate the academic performance of students based on various influencing factors such as study habits, attendance, tutoring support, gender, region, and parental education. By exploring how these variables interact with exam scores, the analysis aims to identify patterns, reveal performance disparities, and uncover the most impactful combinations of attributes that contribute to high or low academic achievement. This insight can help educators, policymakers, or stakeholders implement targeted interventions to support underperforming groups and enhance overall educational outcomes.

### **Key Metrics (Measures)**

- · Exam Score
- Hours Studied per Week (mean per group)
- Attendance (%) (average and correlation with performance)
- Performance Rate by Category (High, Average, Low)
- Score Difference by:
- Gender
- Tutoring status
- Region

#### **Key Dimensions**

- Gender
- Region
- Tutoring (Yes/No)
- Parent Education
- Study Category (Low/Medium/High based on study hours)
- Attendance Level (Poor/Fair/Good)
- Performance Category (Low/Average/High)

#### **Potential Challenges or Limitations**

**Missing or incomplete values** – may affect accurate segmentation or aggregation.

**Categorical imbalance** – e.g., if most students are from one gender or region.

**No time dimension** – we can't analyze performance trends over time.

**Untracked variables** – like socioeconomic status, health, learning style, or school quality.

**Outliers** – extreme scores or attendance rates may skew means.



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## **In Analysis Board**

#### **KPI**

• Total Students: 4,000

• Average Attendance: 75.22%

• Average Hours Studied/Week: 9.86

• Average Exam Score: 71.11

#### **Study Hour Influence on Exam Score**

More study hours directly correlate with higher scores.

### **Average Exam Score and Attendance by Region**

Urban students slightly outperform rural peers in both attendance and scores.

#### **Average Exam Score by Study Category**

High study group leads with the best performance (83), followed by Medium (64) and Low (46).

#### **Total Students by Gender and Performance Category**

Females slightly outnumber males in high and average performance groups.

## Region, Gender, Tutoring, and Average Exam Score

Urban females with tutoring have the highest scores.

# **Average Exam Score by Attendance Level and Performance Category**

Regardless of attendance, high performers consistently score better, but all categories decline with poorer attendance.

### **Average Exam Score by Parent Education**

Scores improve with higher parental education.

#### **Average Exam Score by Attendance Level**

Good attendance corresponds with the highest average scores.



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# Reggie's Students Academic Performance Report

## In Analysis Board (Recs)

Replicate tutoring models used in urban settings for rural areas. Pair this with **virtual peer mentoring**, where high-performing urban students coach rural students weekly via digital platforms.

Introduce a "Learning Loyalty Program" that rewards consistent attendance with non-monetary perks like access to leadership clubs, internship referrals, or library credits.

Host **Parent Academic Engagement Workshops**, focusing on how parents with any education level can support learning at home (e.g., reading schedules, learning apps).

Establish a **weekly check-in system** using SMS or WhatsApp bots that alert guardians when a student's attendance drops and suggest daily study tips.

Launch a **Study Habit Challenge** gamified through a school app, encouraging students to log hours studied weekly, with leaderboards and small recognitions.

Deploy **mobile learning hubs** in rural regions—solar-powered vehicles equipped with tablets and internet access for group study and online tutoring.

Investigate male learning preferences and design **interest-based learning modules** (e.g., using sports stats to teach math) to increase male engagement.

Offer "Study Skill Boost Camps" during weekends or holidays that teach time management, note-taking, and concentration techniques.

Provide **attendance-linked micro-scholarships** or stipends to families in rural areas to incentivize daily participation, especially for older students.

Create a "Level-Up Mentorship Network" matching lowerperforming students with these high performers for regular academic and motivational support.



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#### **Final Observation**

#### **Tutoring Makes a Major Difference**

• Students who received tutoring consistently scored higher, especially **urban females** (avg. score > 82).

#### **Study Time Directly Impacts Performance**

• High study group (13 hrs/week) averaged **83**, while low study group (3 hrs/week) averaged only **46**.

#### **Attendance Correlates with Exam Scores**

• Students with **good attendance** scored **75** on average, compared to **65** for poor attendance.

#### **Urban vs. Rural Disparities**

• Urban students outperformed rural ones both in **attendance** (75% vs. 69%) and **exam scores** (72 vs. 69).

#### **Parental Education Matters**

• Children of parents with tertiary education scored **73**, while those with no formal education scored **68**.

#### **Gender-Based Performance Gap**

• Females slightly outnumbered males in the **high-performing** category.

### **Final Recommendations**

#### **Scale Up Tutoring Programs**

Expand access to tutoring—particularly in rural areas—through online tutoring platforms or community learning hubs.

#### **Promote Study Discipline Early**

Introduce **structured study skill programs** and **time management workshops**, especially for low study-hour students.

#### **Boost Attendance via Incentives**

Implement **attendance-based rewards or stipends** to reduce absenteeism, especially in underperforming regions.

#### **Support Parental Involvement**

Launch **parent education initiatives**, such as training sessions or learning toolkits, to empower parents to support their children regardless of education level.

### Close the Urban-Rural Gap

Invest in **mobile digital classrooms** and improved infrastructure for rural learners to level the learning environment.

#### **Gender-Sensitive Interventions**

Develop male-focused engagement programs, using gamified