Education Performance Analysis

**Counts:**

* There are 2392 total students
* The grade “F” has the greatest number of students with 1211 students meanwhile the grade “A” has the least.
* The Caucasian ethnicity has the greatest number of students with 1207 students, and the average being around 50.46% of all students, which could be due to the fact of the school being located in Europe.

**GPA Analysis**

* **Parental Education:**
  + Students whose parents completed high school or college had the highest average GPAs of 1.95 and 1.30, respectively.
  + Interestingly, students whose parents held bachelor’s degrees or higher had slightly lower average GPAs of 1.81 and 1.82, suggesting a potential inverse correlation between higher parental education and student GPA.
* **Parental Support:**
  + Very high parental support was associated with the highest average GPA of 2.19.
  + Students with no parental support had the lowest average GPA of 1.54.
* **Gender:**
  + Male students slightly outperformed females, with an average GPA of 1.91 compared to 1.89 for females.
* **Absences:**
  + **Attendance strongly influenced performance:**
    - Students with very few absences had the highest average GPA of 3.16.
    - Students with very many absences had the lowest average GPA of 0.93.
  + **Key Insight:** Attendance is a critical factor in student success.

**Extracurricular Activities**

* **Tutoring:**
  + Students who received tutoring achieved a higher average GPA of 2.10, compared to 1.81 for those who didn’t.
* **Participation in Activities:**
  + Students involved in extracurricular activities had an average GPA of 2.01, outperforming those who didn’t (1.83).
* **Sports:**
  + Students who played sports had a slightly higher average GPA of 1.89, compared to 1.87 for those who didn’t.
* **Music:**
  + Students who played musical instruments achieved an average GPA of 2.04, outperforming those who didn’t (1.87).
* **Volunteering:**
  + The difference here was minimal: students who volunteered had an average GPA of 1.91, compared to 1.90 for those who didn’t.

**Key Takeaways:**

1. Absences have the most significant impact on GPA, with very few absences linked to much higher performance.
2. Parental support plays a crucial role, with very high support resulting in better GPAs.
3. Extracurricular activities, especially tutoring and music, show a positive impact on academic performance.