Data-Driven Analysis of Study Habits, Teaching Methods and Resource Utilization

3.07
Average Study Hour
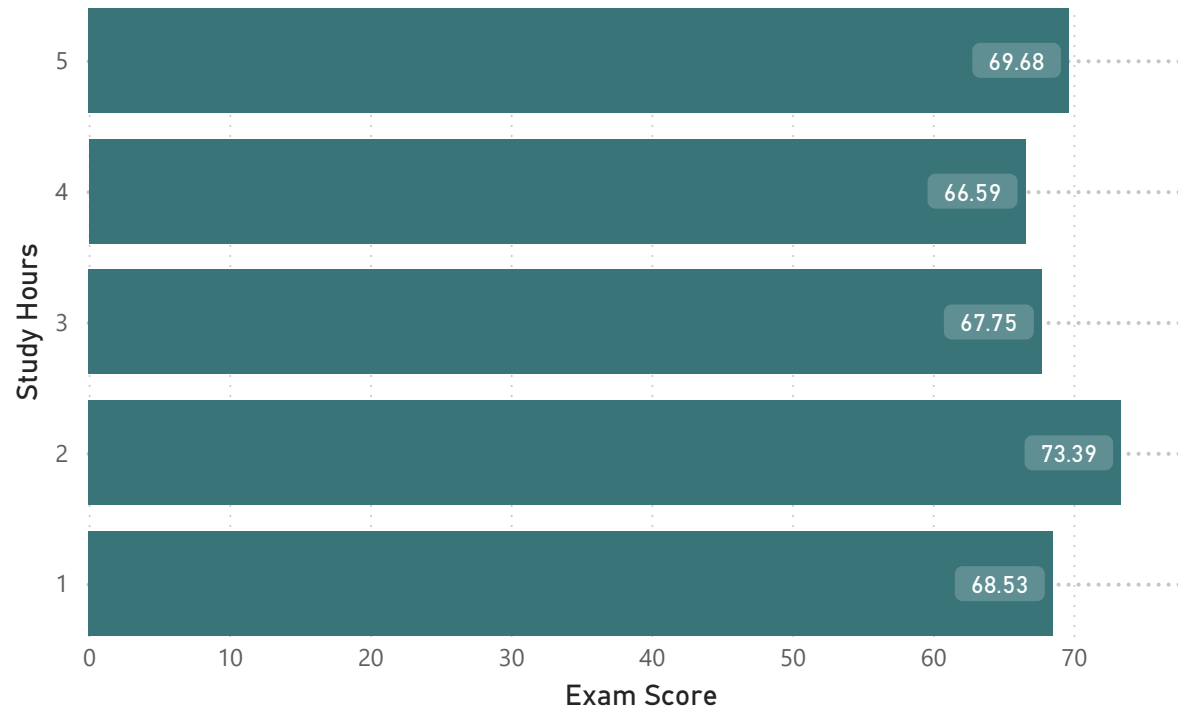
503
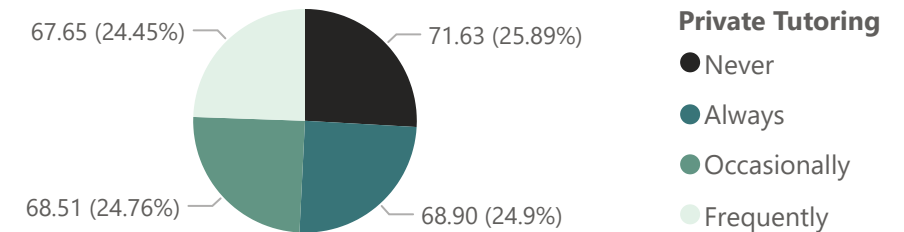Total No. of Students

69.12
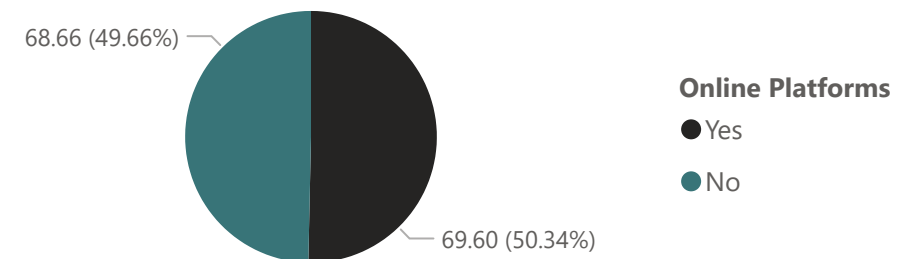Average Exam Score

Average Exam Score by Study Hours

Study Hours	Exam Score
5	69.68
4	66.59
3	67.75
2	73.39
1	68.53

Average Exam Score by Private Tutoring

67.65 (24.45%)
71.63 (25.89%)
68.51 (24.76%)
68.90 (24.9%)

Private Tutoring
- Never
- Always
- Occasionally
- Frequently

Average Exam Score by Online Platform

68.66 (49.66%)
69.60 (50.34%)

Online Platforms
- Yes
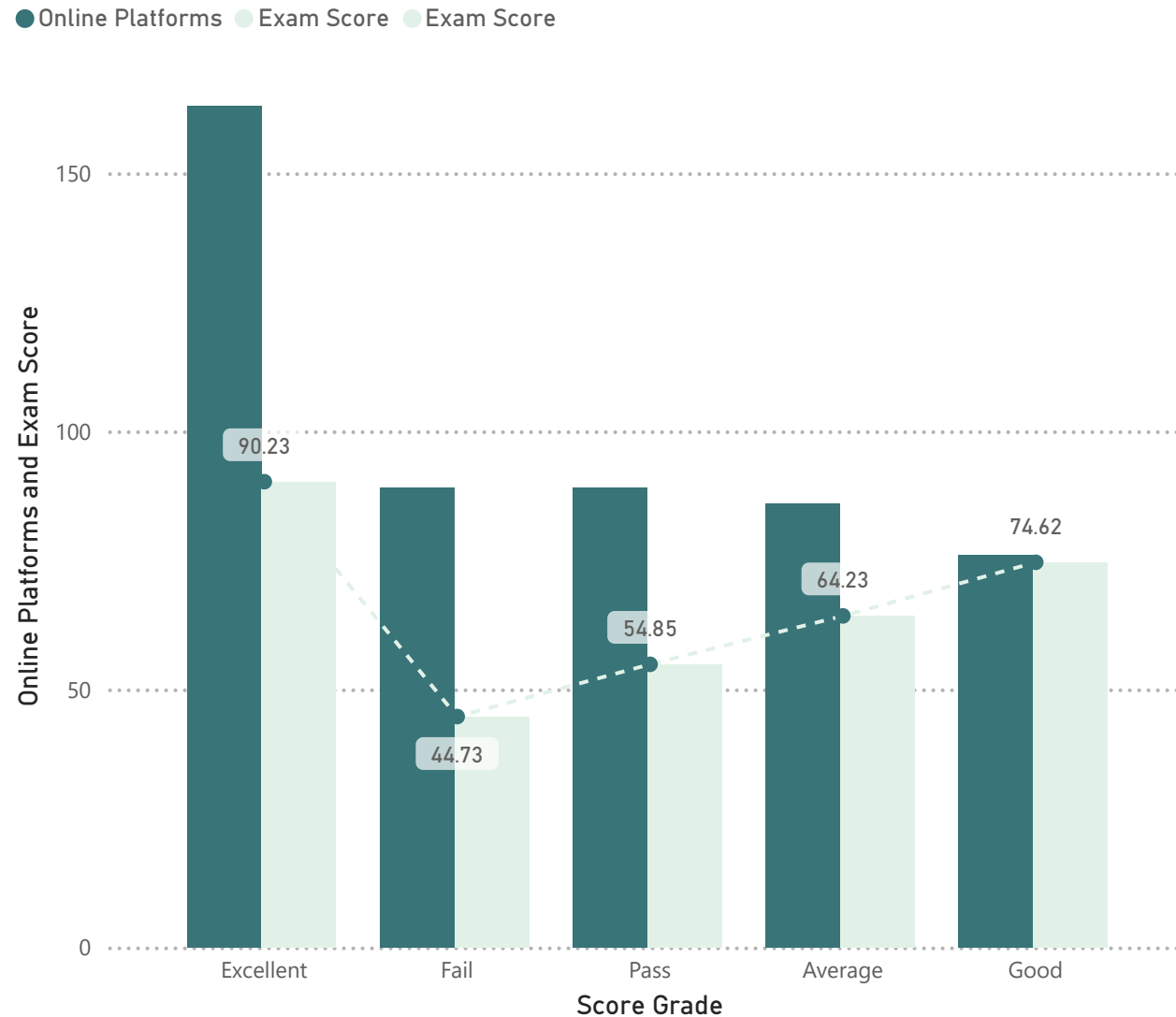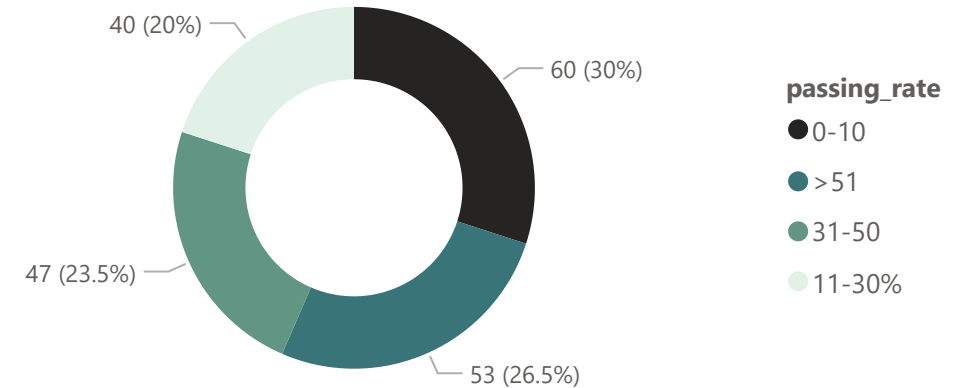- No

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Online Platforms and Average exam Score by Score Grade

● Online Platforms　● Exam Score　● Exam Score

Online Platforms and Exam Score (y-axis)

- Excellent: 90.23
- Fail: 44.73
- Pass: 54.85
- Average: 64.23
- Good: 74.62

Score Grade (x-axis): Excellent, Fail, Pass, Average, Good

Effects of Learning Materials on Passing Rate

- 60 (30%)
- 53 (26.5%)
- 47 (23.5%)
- 40 (20%)

passing_rate
- ● 0-10
- ● >51
- ● 31-50
- ● 11-30%

Top Challenges

- Lack of study material: 56.00
- Low motivation: 49.00
- Poor study habit: 49.00
- Difficulty understandi...: 46.00
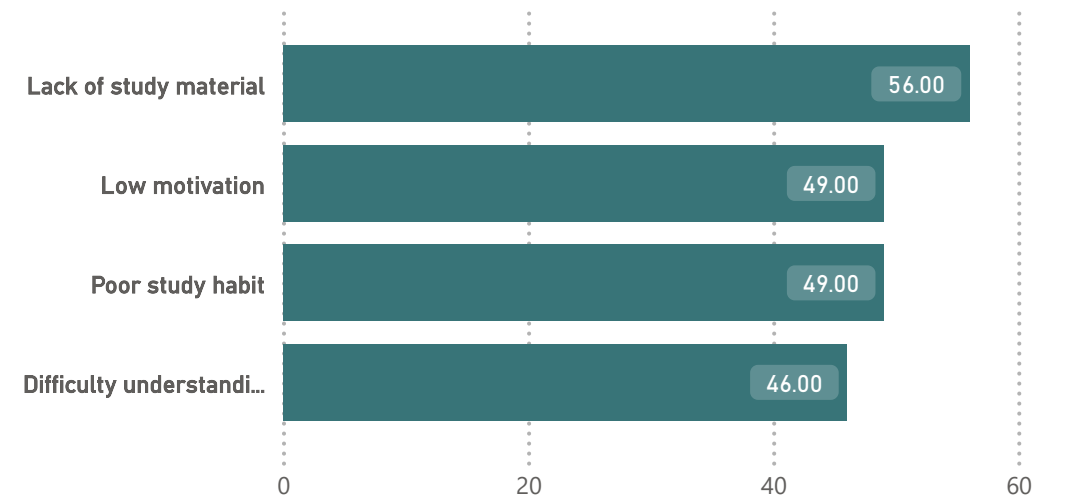
Data-Driven Analysis of Study Habits, Teaching Methods and Resources Allocation

Recommendations to Mitigate Student Failures in WASSCE and JAMB

1. **Enhanced Access to Online Learning Platforms**
   - **Action:** Schools want to collaborate more with educational technology companies to provide students with free or subsidized access to quality online learning platforms.
   - **AI Integration:** Use AI algorithms to personalize learning experiences based on student performance and preferences, ensuring tailored resources and support.

1. **Structured Tutoring Programs**
   - **Action:** Develop structured tutoring programs in schools, focusing on key subjects where students struggle the most.
   - **AI Integration:** Implement AI-driven analytics to identify students' specific learning needs and to schedule targeted tutoring sessions accordingly.

1. **Regular Performance Tracking and Feedback**
   - **Action:** Establish a regular tracking system to monitor students' performance over time and provide feedback.
   - **AI Integration:** Implement AI tools that analyze performance data to predict future outcomes and suggest intervention strategies.

1. **Mental Health and Well-being Support**
   - **Action:** Provide mental health resources and counseling for students to address anxiety and stress associated with exams.
   - **AI Integration:** Use AI-driven applications to offer students anonymous mental health support and resources tailored to their needs.

1. **Student Empowerment and Engagement**
   - **Action:** Foster a student-led environment where learners can participate in discussions about their educational challenges and successes.
   - **AI Integration:** Use AI sentiment analysis to gather feedback from students about their learning experiences and adjust programs based on their input.