



Analyzing Dropout Rates for Quality Education

Welcome to our data-driven approach to reduce dropout rates and enhance educational retention. This presentation, by Albert Opoku-Twumasi, explores innovative strategies to support SDG 4 - Quality Education.

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Project Overview & SDG Alignment



SDG Alignment

Our project aligns with SDG 4, focusing on ensuring free, equitable, and quality secondary education for all youth.



Project Overview

We analyze dropout rates across demographics to address inequities and retention challenges in secondary education.



Significance

Our insights will help stakeholders create targeted interventions to support SDG 4 and reduce dropout rates.



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Problem Definition

1 High Dropout Rates

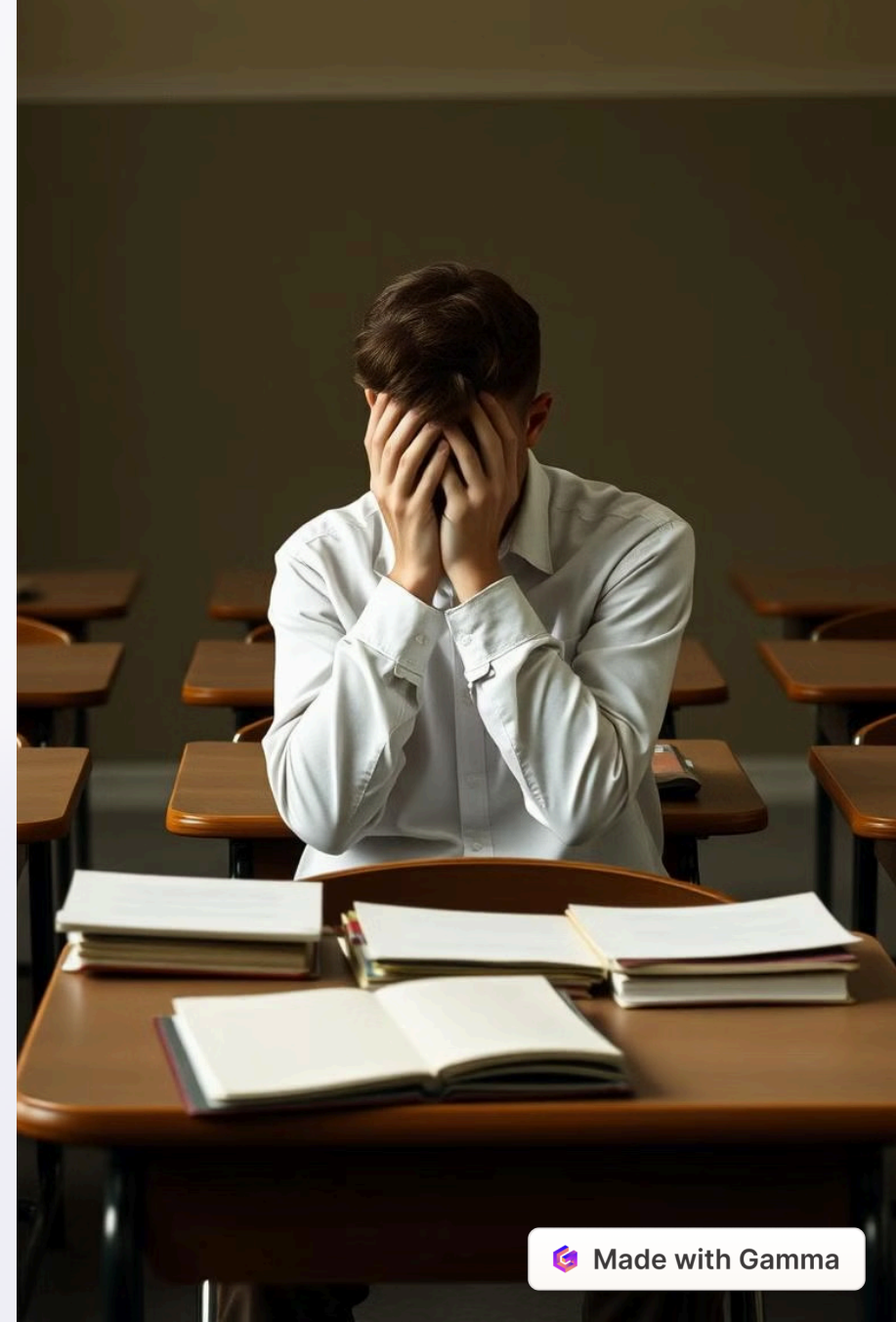
Secondary education faces significant dropout challenges, varying by demographics like gender and socioeconomic status.

2 Limited Data Analysis

Stakeholders lack adequate data and analysis to create targeted interventions for at-risk students.

3 Project Objective

We aim to use data to identify contributing factors and at-risk groups for informed policy-making.



Project Significance

Impact on Education

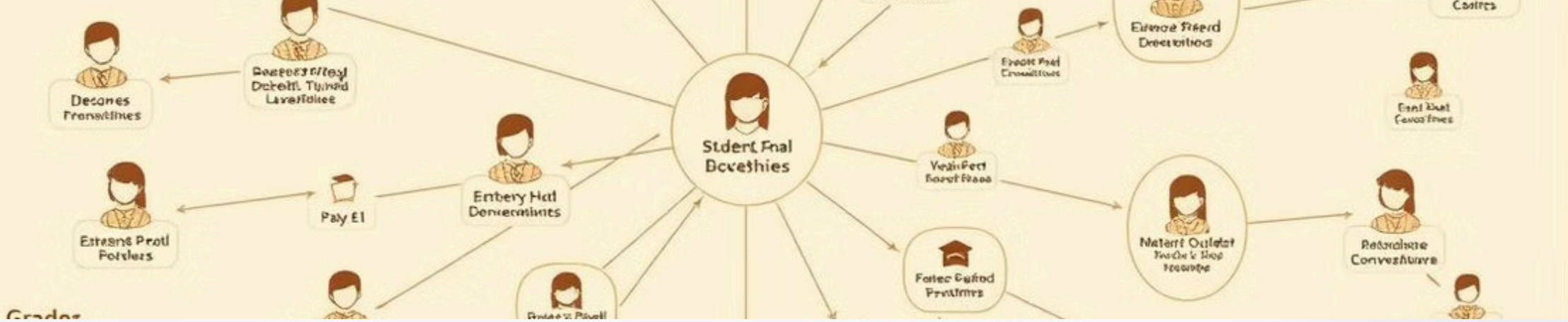
Early identification of dropout risks supports initiatives for student retention and equal opportunities.

Long-term Effects

Dropout rates significantly impact lifetime earnings, community development, and overall well-being.

Key Beneficiaries

Schools, policymakers, and communities will benefit from improved educational access and reduced inequality.



Database Design and Schema

| Table | Purpose |
|-----------------|---|
| Students | Store individual student information and demographics |
| Schools | Contain data on educational institutions |
| Dropout_Records | Track student dropout incidents and reasons |
| Demographics | Hold broader demographic data for analysis |

Data Collection & Analysis Approach

1

Data Sources

We collect data from student records, demographic surveys, and school databases.

2

Fields Analyzed

Our analysis covers gender, age, socioeconomic status, school type, and regional factors.

3

Data Processing

We clean and transform data to prepare for meaningful statistical analysis.



Data Analysis Insights

Demographic Trends

Our analysis reveals significant variations in dropout rates across gender and socioeconomic groups.

Geographic Insights

We've identified dropout hotspots and underserved areas through regional data analysis.

Contributing Factors

Financial constraints, family issues, and health concerns emerge as key dropout factors.

Excel Dashboard Demonstration

1

Dashboard Features

Our Excel dashboard offers interactive filters and visual summaries of dropout trends.

2

Real-time Analysis

Stakeholders can track and analyze dropout data as it's updated.

3

Decision Support

The dashboard empowers data-driven decision-making for education professionals and policymakers.





Implementation & Next Steps

1

Expand Data Collection

We'll engage more schools and local authorities to broaden our data sources.

2

Enhance Database

Our team will integrate more demographic data and track progress over time.

3

Future Enhancements

We plan to add interactive features and predictive models to our analysis tools.



Closing & Call to Action

1

Project Goals Recap

We aim to address dropout rates through data-driven insights aligned with SDG 4.

2

Call to Action

We invite you to partner, fund, or support our project's expansion.

3

Contact Information

Reach out to Albert Opoku-Twumasi for collaboration opportunities and further discussions.