# **SDG Problem Definition**

# **Project Title:**

**Analysis of Student Dropout Rates at Emeral College**

## **Sustainable Development Goal (SDG) Alignment:**

**SDG 4: Quality Education**This project aligns with **SDG 4**, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Specifically, it addresses **Target 4.1**: "By 2030, ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes."

## **Problem Definition:**

### **Issue:**

Student dropout rates remain a significant challenge in many educational institutions globally. At **Emeral College**, a significant portion of students drop out before completing secondary school, which threatens their long-term career prospects and overall contribution to society. Dropout rates are influenced by a variety of factors including economic hardships, lack of resources, family issues, bullying, and health-related problems. This project aims to analyze and understand the patterns and underlying reasons for student dropout in the college.

### **Focus:**

The project will focus on identifying the **key reasons for dropout** at Emeral College, the **demographic patterns** (age and gender) of students most likely to drop out, and the **times of the year** (months) when dropouts are more prevalent.

### **Key Questions:**

1. What are the primary reasons for student dropout at Emeral College?
2. How does dropout rate differ across **age** and **gender** groups?
3. Which months experience the highest student dropout rates?
4. Can insights from this data be used to develop programs to reduce dropout rates?

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### **Importance of the Problem:**

Student dropout not only affects the individual but also the society and economy at large. Students who leave school without completing secondary education are at a greater risk of:

* Limited career opportunities
* Poverty
* Social exclusion
* Negative health outcomes

Reducing dropout rates will improve **student retention**, ensure **higher educational attainment**, and ultimately contribute to achieving the broader goal of **Quality Education for All** under SDG 4.

## **Scope of the Project:**

The project will:

1. **Collect and Analyze Data**: The project will use available dropout data, specifically focusing on age, gender, reasons for dropping out, and the month of dropout.
2. **Database Design**: A relational database will be designed to store and manage the student data.
3. **SQL Analysis**: SQL queries will be used to analyze trends in dropout rates across different demographics.
4. **Data Visualization**: Microsoft Excel will be used to visualize the trends and provide actionable insights through interactive charts and dashboards.

## **Objective of the Project:**

The primary objective is to use a **data-driven approach** to identify and analyze the key factors contributing to student dropout at Emeral College. Insights gathered will be used to propose targeted solutions aimed at reducing dropout rates and improving educational outcomes, particularly for vulnerable groups.