

## Case Study: Dropout Rates and Learner Engagement in VET Programs

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### **Overview / Purpose of the Case Study:**

This case study is designed to enhance participants' analytical skills by applying their theoretical knowledge to practical, real-world problems in the VET sector. By analyzing the provided data, participants will identify underlying patterns and causes of dropout rates and propose actionable solutions. This exercise will foster a deeper understanding of how data-driven decisions can improve educational outcomes and student retention in vocational training programs.

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### **Background:**

Recent data from several VET institutions across the country have highlighted a concerning trend of increasing dropout rates among students. This trend poses significant challenges not only to the institutions but also impacts the broader goal of equipping a skilled workforce. The case study revolves around a particular VET institution, "TechVoc College," which has observed a 15% increase in dropout rates over the past two years.

## **Data Sets**

### **1. Student Demographics**

#### **Dataset Structure:**

- **Student ID**
- **Age**
- **Gender (Male/Female/Other)**
- **Socioeconomic Status (Low/Middle/High)**
- **Educational Background (High School Diploma/GED/None)**

Student ID	Age	Gender	Socioeconomic Status	Educational Background
001	19	Male	Middle	High School Diploma
002	21	Female	Low	GED
003	18	Other	High	High School Diploma
004	22	Female	Middle	High School Diploma
005	20	Male	Low	None
006	23	Female	High	High School Diploma
007	19	Male	Low	High School Diploma
008	24	Other	Middle	GED
009	21	Male	High	None
010	20	Female	Middle	High School Diploma

## 2. Course Enrollment Data

- **Dataset Structure:**
  - **Student ID**
  - **Course Type (Practical/Theoretical)**
  - **Duration in Program (Months)**
  - **Attendance (%)**

Student ID	Course Type	Duration in Program	Attendance
001	Practical	6	90%
002	Theoretical	12	75%
003	Practical	4	50%
004	Theoretical	8	85%
005	Practical	10	60%
006	Theoretical	11	90%
007	Practical	7	80%
008	Theoretical	3	40%
009	Practical	5	70%
010	Theoretical	9	95%

### 3. Student Performance Data

- **Dataset Structure:**
  - **Student ID**
  - **Course Type**
  - **Grade (Scale 0-100)**

Student ID	Course Type	Grade
001	Practical	88
002	Theoretical	67
003	Practical	78
004	Theoretical	92
005	Practical	65
006	Theoretical	89
007	Practical	75
008	Theoretical	55
009	Practical	82
010	Theoretical	90

#### 4. Student Feedback

- **Dataset Structure:**
  - **Student ID**
  - **Satisfaction Level (Scale 1-5)**
  - **Feedback Category (Facilities, Resources, Instructor Support)**
  - **Comments**

Student ID	Satisfaction Level	Feedback Category	Comments
001	4	Facilities	Well-equipped labs
002	3	Resources	Needs more study materials
003	5	Instructor Support	Very supportive teaching staff
004	2	Facilities	Outdated equipment
005	4	Resources	Adequate resources available
006	5	Instructor Support	Engaging and knowledgeable
007	3	Facilities	More space needed
008	4	Resources	Excellent library facilities
009	2	Instructor Support	Needs more one-on-one time
010	5	Facilities	Modern and well-maintained

#### 5. Institutional Support Data

- **Dataset Structure:**
  - **Support Service**
  - **Availability (Yes/No)**
  - **Utilization Rate (%)**

Support Service	Availability	Utilization Rate
Counseling Services	Yes	40%
Financial Aid	Yes	25%
Extra-curricular Activities	Yes	60%
Career Counseling	Yes	35%
Tutoring Services	No	N/A
Job Placement Help	Yes	50%
Online Resources	Yes	30%

## **Task for Participants:**

### **Instructions:**

#### **1. Data Analysis:**

Review and analyze each dataset to identify trends and correlations between demographics, course details, performance, feedback, and support services.

Pay special attention to any indicators of potential disengagement or factors commonly associated with higher dropout rates.

#### **2. Synthesis of Findings:**

Combine findings from individual datasets to form a holistic view of the student experience and institutional effectiveness.

Identify which factors are most strongly correlated with high dropout rates.

#### **3. Develop Recommendations:**

Based on the analysis, develop actionable recommendations aimed at reducing dropout rates.

Propose specific changes to course structures, support services, and institutional policies that could improve engagement and retention.

#### **4. Presentation:**

Prepare a presentation outlining your analysis, findings, and recommendations.

Ensure to justify your recommendations with data and highlight expected outcomes.

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*Every participant should include in answers the Text Format Guidelines:*

- **Font Style:** Use Arial for the main text of your document.
- **Font Size:** Main text should be set in 12-point font. This size is optimal for readability without straining the eyes.
- **Headings and subheadings** may be set in 14-point font to distinguish them from the main body text and improve navigability of the document.
- **Font Color:** Text should be black to ensure maximum contrast and readability.
- **Line Spacing:** Use double spacing for the main body text to enhance readability and allow room for comments and corrections. Single spacing can be used for headings, footnotes, and quotations longer than 40 words.
- **Paragraph Formatting:** Use full text alignment
- **Consistency:** Ensure that all text adheres to these guidelines to maintain a uniform appearance throughout the document.