

# UK Government Education Expenditure Analysis (1926–1996)

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## 1. Project Objective

The objective of this project is to analyze the UK government’s expenditure on education from 1926 to 1996. The aim is to identify top and least funded education categories, observe year-over-year trends in educational spending, flag missing or inconsistent data, and calculate the percentage share of each category over time.

## 2. Data Source

Original Dataset: UK Government Spending from data.gov.uk  
Data Duration: 1926 to 1996  
Format: Excel (.xlsx)

## 3. Tools Used

Microsoft Excel:

- Data Cleaning (IF, TRIM, LEN, ISBLANK, ISNUMBER)
- Pivot Tables
- VLOOKUP, INDEX-MATCH, XLOOKUP
- Conditional Formatting
- Charts (Bar, Column, 3D Charts, Stacked Columns)
- Slicers & Filters

## 4. Data Fields

Column Name	Description
Year	Year of expenditure
Expenditure Type	Education-related department or initiative
Amount (£)	Amount spent in GBP
YoY	Year-over-year change
Amount Status	Missing/Not Missing status flag
% Share	Proportion of category in total for that year

## 5. Project Workflow

### Step 1: Data Cleaning

- Removed blank rows/cells
- Marked missing values in 'Amount (£)' column
- Created a 'Missing/Not Missing' status column

### Step 2: Feature Engineering

- Calculated % Share of each type annually
- Applied YoY formulas
- Used Conditional Formatting for outliers or blanks

### Step 3: Pivot Tables

- % Share by Type
- Year-wise Spending Trend
- Average Spend per Type

### Step 4: Dashboard

- Built using Pivot Charts (Bar, Column, 3D)
- Slicers: Year, Group Label
- KPIs: Total Spend, Top/Bottom Categories

## 6. Key Insights

- Top Spending Category: Total Gross Expenditure - £2202400000
- Least Spending Category: Appropriations in Aid (deduct) - Primary Education - £7276
- Peak Spending Year: 1996
- Peak Spending Year: 1930
- Total Spend: £47.37 Billion
- Blank cells were marked as 'Missing'

## 7. Folder Structure

UK-Education-Spending/

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└─ Data/

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└─ UK\_Education\_Expenditure\_1926\_1996.xlsx

└─ Images/

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| └─ dashboard_preview.png
└─ Docs/
    | └─ Project_Documentation.docx
    └─ README.md
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