Describing Graphs

(analysis & evaluation)

EXAMPLE

Presentation skills

This lesson begins with describing basic graphs and suggesting what they could represent. It then provides the language necessary for describing, analysing and evaluating with a guided practice. This is followed by students researching and analysing graphs/charts/tables from the Office of National Statistics (ONS) and giving a short presentation on their findings.

Teacher's Notes EXAMPLE

Aim: *to develop the students' ability to describe graphical data and practice the key skills of analysis and evaluation.*
Level: ***** [B1/ B2/C1/C2]   **Lesson Time:** 1-2 hours

Graphical Analysis & Evaluation Lesson Plan

1.Lead in (10 minutes)
  i.   Ask students to look at **Graph 1** (worksheet) and explain the graph to your partner.
  ii.   Teacher elicits the most significant points from the graph [answers: peaks in Feb, April, Dec].
  iii. Asks students to suggest a reason for these peaks and what could the product be.
        Product is flowers (Feb=Valentine's day / April = Easter / Dec = Christmas).
  iv.   Highlight that **analysis** is identifying key highs and lows and **evaluation** is the reasons why.
        [Disclaimer: There are different understandings of analysis & evaluation – this is one way]
  v.   Do the same with the **Bar Chart 2** (explain it, highs and lows, why? = ice cream sales).
  vi.   Labelling graphs: explain the key points (1-4) that must be said before analysing a graph.

2. Language Sheet 1: Describing / analysing and evaluation graphical data. (10 minutes)
  i.   Students read through the language sheet.
  ii.   Ask students to practice the phrases (choral drilling with teacher if necessary).
  iii. IMPORTANT: highlight the three key stages [describe, analyse, evaluate].
  iv.   Extra: describing graphs activity: www.academic-englishuk.com/graphs

3. Worksheet 2: Example Graph (10+ minutes + feedback)
  i.   Give out worksheet with Example Graph and ask students to fill in the information.
  ii.   Feedback using the model answer.
        Note: students may need help and guidance with the evaluation section.

4. Worksheet 3: Exercise Graph (10+ minutes + feedback)
  i.   Give out worksheet with Exercise Graph and ask students to fill in the information.
  ii.   Feedback: student's own answers (Key points: peak in 1995 but
        Possible reasons: , better security
                                          , etc…).

5. Graphical Data: preparation: (20 minutes)
  i.   Give each student one of the web links to graphs from ONS.
  ii.   Show the students how to find the information: go to webpage / click on the specific section key / find the figure number.
  iii. Allow 20 minutes for students to prepare a 1 to 2-minute mini presentation of their graph.
  iv.   Ask for 2/3 pieces of key data to be described only.
  v.   They must follow the 3 key stages (describe the key elements (labelling), analysis and evaluation).
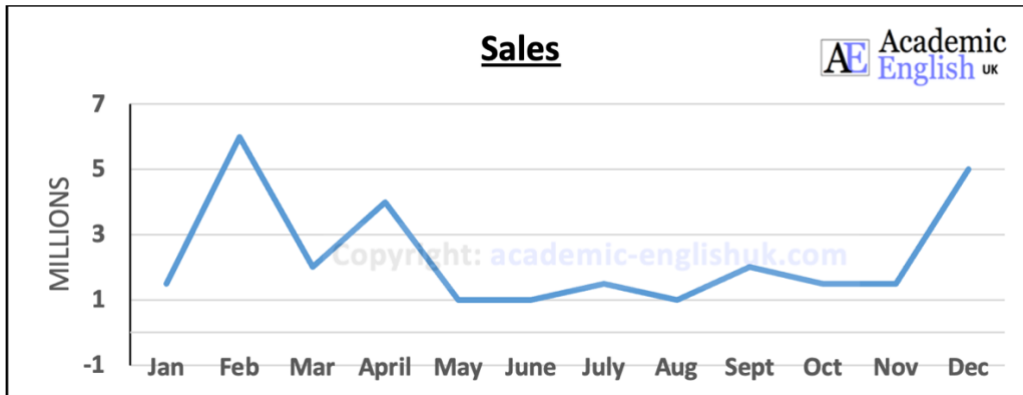
6. Presentation (30 minutes)
  i.   Students present their graph slide in front of the class – show webpage graph on board.
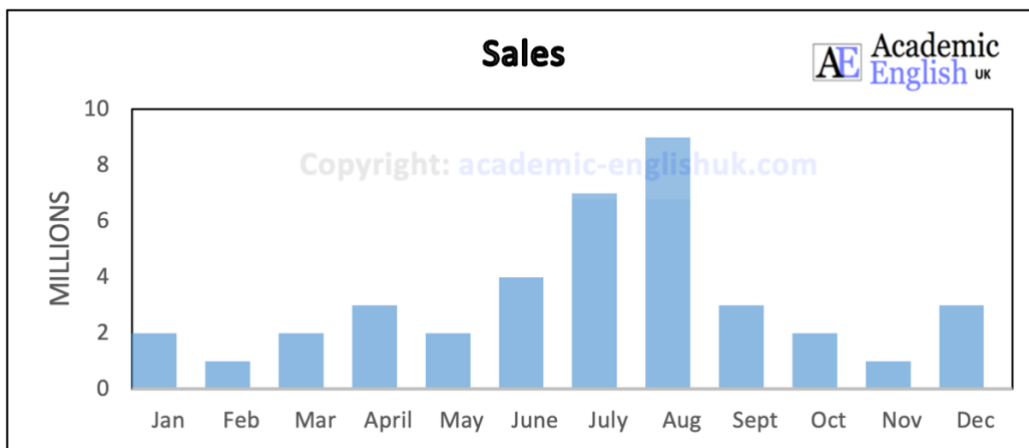 ii.   Teacher can give feedback.

Graphs and Statistics EXAMPLE

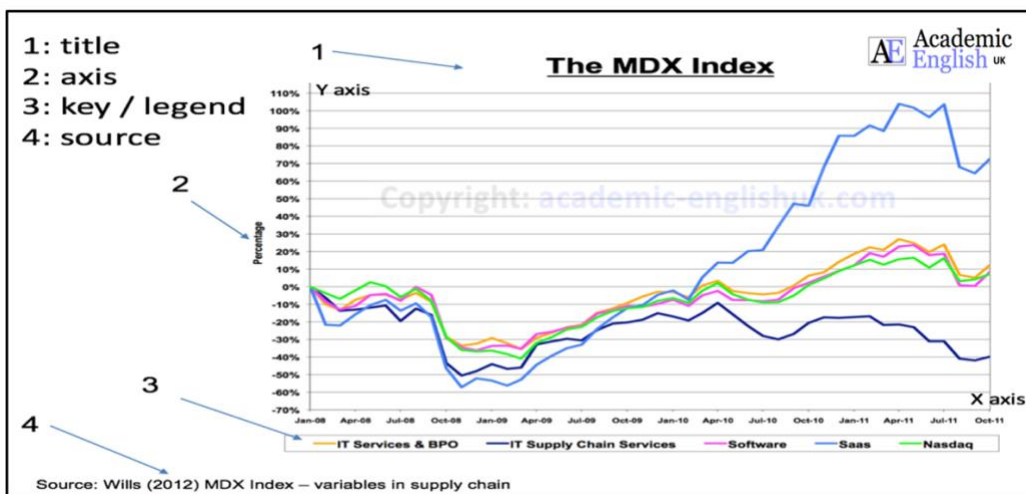- Describe these graphs (analysis) and ▮▮▮▮▮▮ reasons for these ▮▮▮▮ (evaluation)

Graph 1

Bar Chart 2

Labelling Graphs

1: title
2: axis
3: key / legend
4: source

Source: Wills (2012) MDX Index – variables in supply chain

Language Sheet 1: Describing graphs and charts

1. Describe the graph layout (title / source / axis / key)

The graph from (source) presents data on (title)…
The graph ▓▓▓▓▓▓▓▓▓▓▓▓▓ */ illustrates (title)…*
If we look at this graph on (title) from (source) you can see...
The y axis ▓▓▓▓▓▓▓▓ *and the x axis* ▓▓▓▓▓▓▓▓
(Graph) These lines represent… (Bar) These Columns are… (Pie) These segments are… (Table) These rows are…

2. Analysis: describe key points from the graph

Overall summary: Overall, there is / has been… / Generally, there is…
What you can see is… / From ▓▓▓▓▓▓▓▓▓▓▓ *see...*
I'd like to focus your attention on…
If ▓▓▓▓▓▓▓▓▓▓▓ *you'll see / notice /* ▓▓▓▓▓▓▓▓
(Not all phrases are shown – all in paid version)
A key ▓▓▓▓▓▓▓▓▓▓▓ *… / Two …*
An important point is… / Two important ….
What is ….
An ▓▓▓▓▓▓▓ *…*
An analysis …

Useful Graph Vocabulary

UP: *increase / rise / grow / went up / soar / double / multiply / climb / exceed /*
DOWN: *decrease* ▓▓▓▓▓▓▓▓▓▓ */ plummet / halve / depreciate / plunge*
UP & DOWN: *fluctuate /* ▓▓▓▓▓▓▓▓▓
SAME: *stable (stabilised) / levelled off / remained constant or steady / consistent*
(Not all phrases are shown – all in paid version)
CHANGES: *gently …*
CHANGES: *suddenly …..*
TOP: *reached a peak /……*
BOTTOM: *bottomed out / ……*

3.Evaluation: give reasons for the data

This seems to suggest that...
This is ▓▓▓▓▓▓▓▓▓▓▓ *of...*
This is (clearly) due to…
(Not all phrases are shown – all in paid version)
One ▓▓▓▓▓▓▓
An evaluation of this …
To ▓▓▓▓▓▓▓▓ *…*
Overall, this highlights …
▓▓▓▓▓▓▓▓▓ *…*
A possible future …

Worksheet 2: Example Graph 1
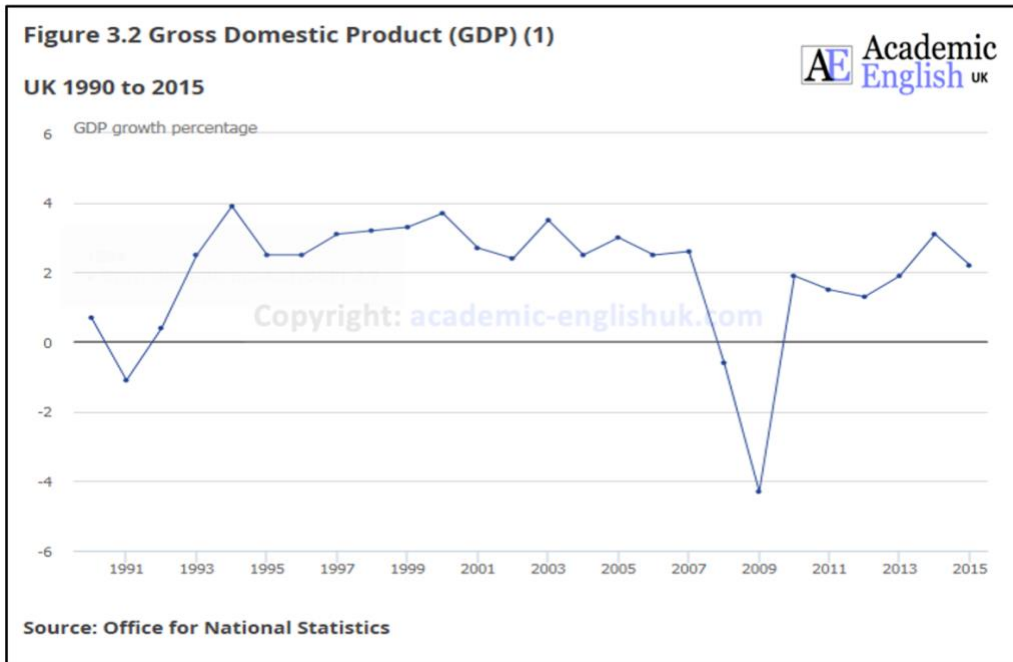
Figure 3.2 Gross Domestic Product (GDP) (1)

UK 1990 to 2015

Source: Office for National Statistics

Language: *Describe the graph using the phrases below to help you (write in your answers)*

The graph from (source) shows/ illustrates (title)…

The y-axis is… ▓▓▓▓▓▓▓▓▓▓▓▓▓▓ is…

Overall, ▓▓▓▓▓▓▓▓▓▓▓▓▓… between…

(Not all phrases are shown – all in paid version)

I'd like to focus your …

(Analysis) The ▓▓▓▓▓▓▓▓▓ is …

(Evaluation) This is/was …

(Analysis) The second …

(Evaluation) This is / was …

Overall, ▓▓▓▓▓▓▓▓▓▓ …

A future prediction …

Example ANSWERS

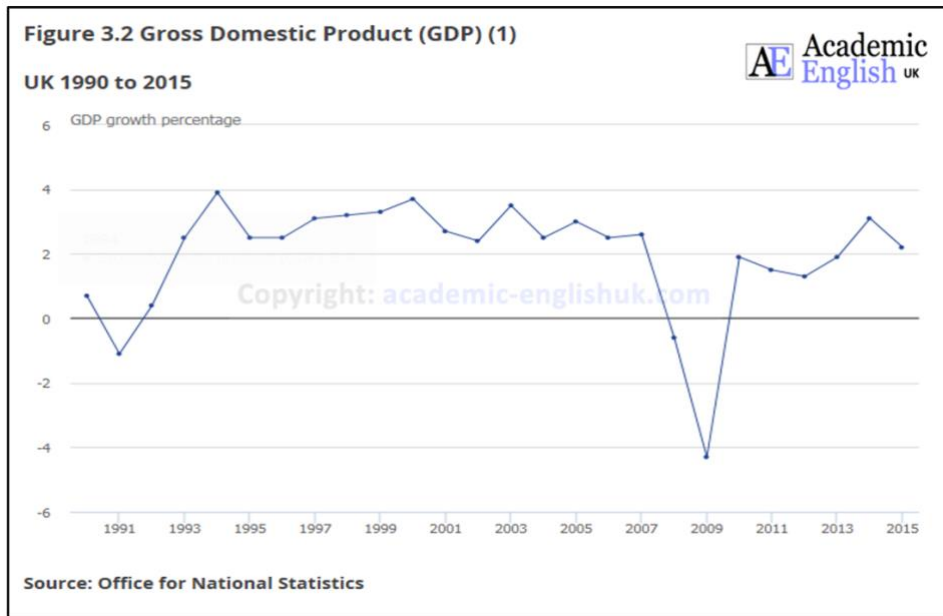![Figure 3.2 Gross Domestic Product (GDP) (1) UK 1990 to 2015 - line graph showing GDP growth percentage from 1991 to 2015. Source: Office for National Statistics](chart)

Language:

The graph from The Office of National Statistics (2015) ▓▓▓▓▓▓▓▓▓ *the UK over the years 1990 to 2015.*

The y axis is the percentage ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓ *individual 15 years.*

Analysis: *Overall, GDP has* ▓▓▓▓▓▓▓▓▓▓▓ *to 2007 and again in 2013 to 2015 within the 2-4% range.*

I'd like to focus your attention on two key significant areas.

Analysis: *The first one is in 1991,* ▓▓▓▓▓▓▓▓▓▓ *dramatically soared to 4% within two years.*

Evaluation: *This was possibly because of the UK suffering a small recession caused from high interest* ▓▓▓▓▓▓▓▓▓▓ *lowered the* ▓▓▓▓▓▓▓▓▓▓▓ *after this and this would explain the sudden rise in 1992.*
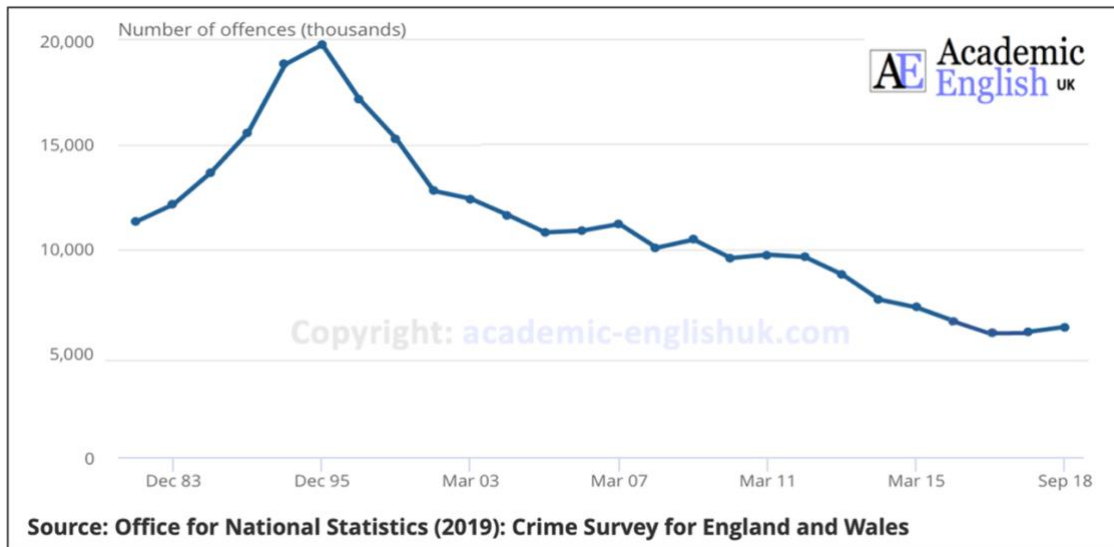
Analysis: *The second interesting point is the sudden drop in GDP in 2007* ▓▓▓▓▓ ▓▓▓▓▓▓▓▓▓

Evaluation: *This is clearly due to the 2007/8 global financial crash, where the many countries suffered what is now being called* ▓▓▓▓▓▓▓▓▓▓

Evaluation: *Overall, this graph highlights the evidence that global markets and recession* ▓▓▓▓▓▓▓▓▓

Prediction: *There is a possibility that with such uncertainty in the world financial markets that* ▓▓▓▓▓▓▓▓▓▓

Academic English UK

Worksheet 3: Exercise Graph

Source: Office for National Statistics (2019): Crime Survey for England and Wales

Language: *Describe the graph using the phrases below to help you (write in your answers)*

The graph from (source) shows/ illustrates (title)…

The y-axis is… ░░░░░░░░░░░░░░░ is…

Overall, ░░░░░░░░░░░░░░░░░… between…

(Not all phrases are shown – all in paid version)

I'd like to focus your …

(Analysis) The ░░░░░░░░ is …

(Evaluation) This is/was …

(Analysis) The second …

(Evaluation) This is / was …

Overall, ░░░░░░░░░░░ …

A future prediction …

Graph Data Analysis

Task: Analyse and evaluate an Office of National Statistics (ONS) graph / chart / table and give a 1-2-minute presentation on your findings.

ONS website: https://www.ons.gov.uk

Guidelines

   i.   Your teacher will allocate one of the graphs / charts / tables below.

  ii.   Open the specific ONS webpage link and find the specific section and graph / chart / table.

 iii.   Analyse and evaluate the graph / chart / table using language sheet 1.

 iv.   You must follow the 3 key stages (describe the key elements (labelling), analysis and evaluation).

  v.   You may need to do some internet research to help your understanding / evaluation.

 vi.   Give a 2-minute presentation of your graph using your own analysis and evaluation.

 vii.   You have 20-minutes preparation time.

Office of National Statistics (ONS) Data links

Graph 1

Crime Survey (Exercise on worksheet)
Section 5: An overview of crime
Figure 1: Crime estimated by the survey has not changed over the last year
https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/yearendingseptember2018#overview-of-crime

Graph 2

Employment and labour rates
Figure 5: The increase in unemployment was driven by people unemployed for up to six months
https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/employmentintheuk/latest

Bar Chart 3

Aging Population
Section X: The 90 years and over population is getting older.
Figure X: Number of people aged 90 years and over by age group, selected years, UK, 2002 to 2017
https://www.ons.gov.uk/

Graph 4

Tourism trends
Section X: What are the main trends in visits and spending?
Figure X: Overseas residents' visits to the UK and UK residents' visits abroad by month
https://www.ons.gov.uk

There are 20 graphs / charts / tables in the paid lesson version

Other topics: life satisfaction / divorce / religion / mental health / alcohol / mobile phones / murder / technology / leisure / population growth / life expectancy / etc..