

Incorporating Data and Illustrations

1.1

Answer the following questions from your own knowledge, or by using the information in this unit.

a) What is data?

b) Why is data sometimes included in academic texts?

What Is Data?



quantities

information

graphs

measurement

observations

facts

numbers

Incorporating Data and Illustrations

Another aspect of academic writing is data commentary. Data is statistical information that may be presented graphically in the form of tables or figures. Data is used to support the information and ideas of the academic researcher. An illustration might be, for example, a photograph or diagram. In academic writing, illustrations should only be used to clarify ideas or information; in other words, they should enhance an explanation. If you include any data or illustrations in your academic texts, make sure that they have a purpose – they should not be used for decoration.

PURPOSE OF DATA COLLECTION

- **To obtain information**
- **To keep on record**
- **To make decisions about important issues,**
- **To pass information on to others**
- **For research study**

REMEMBER: figures and tables are accompanied by captions that briefly describe the content

- a) The language style is like headlines, i.e., no articles or verbs; concise language using key words.
- b) The position of the caption depends on the type of illustration. For tables the caption goes above (*tabletop*); for figures the caption goes below.

Table 1.5 World international tourist arrivals 1970-93
Source: Youell, R. (1995). *Leisure & tourism: Advanced GNVQ*.
Longman: Harlow.

Year	Arrivals (million)	Rate of growth (%)
1970	165.8	15.5
1971	178.8	7.9
1972	189.1	5.7

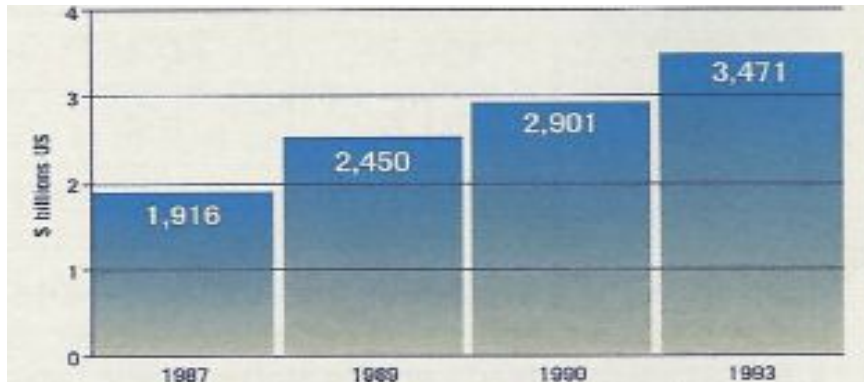


Fig 1.22 Travel and tourism output (Source: WTTC)
Source: Youell, R. (1995). *Leisure & tourism: Advanced GNVQ*.
Longman: Harlow.

The language used for incorporating data

The technological advances in aircraft design which resulted from developments during the Second World War led to air travel becoming a reality for the masses of the population from the 1950s onwards. The Boeing 707 jet was introduced in 1958 and led to a surge in scheduled and charter flights, the latter being combined with accommodation, transfers and courier services to form the 'package holiday' that is so familiar to us in the early twenty-first century (See Figure 1.21).

The Introduction of the Package Tour

The 1960s saw the beginning of the rapid increase in the number of package holidays sold. Destinations such as the coastal areas of Southern Spain, the Balearic Islands and Greece were favourite locations for British and other European travellers. The convenience of an all-inclusive arrangement, coupled with the

increased speed which the new aircraft brought, caught the imagination of the British travelling public. The age of mass tourism had truly arrived.

Travel and Tourism Today

Tourism is now commonly referred to as 'the world's biggest industry'. According to the World Travel and Tourism Council (WTTC), in 1990 the industry:

- Generated an annual turnover equivalent to 5.9 per cent of the world GNP
- Employed 118 million people worldwide
- Accounted for over 6.7 per cent of the world's capital investment
- Contributed over 5.6 per cent to total tax payments worldwide

Figure 1.22 below shows the growth in travel and tourism gross output (sales generated) between 1987 and 1993.

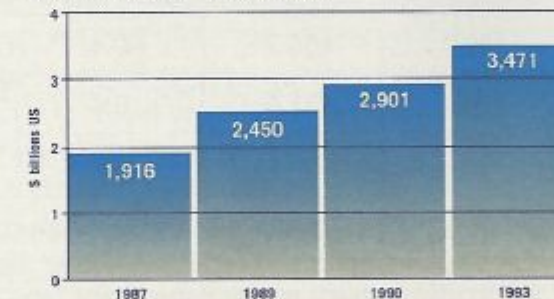


Fig 1.22 Travel and tourism output (Source: WTTC)
Source: Youell, R. (1995). *Leisure & tourism: Advanced GNVQ*.
Longman: Harlow.

The language of data commentary

Look at the table below, and complete Columns A and B as far as possible by identifying the word forms.

Column A: Nouns	Column B: Verb forms	Column C: Accompanying adjective/adverb
rise		<ul style="list-style-type: none"> • • rose steadily
	increase/increased/ has increased	<ul style="list-style-type: none"> • dramatic increase • increased rapidly
fall		<ul style="list-style-type: none"> • • fell dramatically
drop		<ul style="list-style-type: none"> • •
decrease		<ul style="list-style-type: none"> • •
	stabilise	<ul style="list-style-type: none"> • remained stable •
fluctuation		<ul style="list-style-type: none"> • •

steady	dramatic	rapid	slow	dramatic
significant	expected	unexpected		noticeable

Possible collocations:	Examples:
<i>slight/slightly</i>	a slight increase
<i>gradual/gradually</i>	decrease gradually
<i>frequent/frequently</i>	a frequent fluctuation
<i>occasional/occasionally</i>	an occasional rise
<i>alarming/alarmingly</i>	dropped alarmingly

Start Of Response

Start

- The provided
- The presented
- The given
- The supplied
- The shown

Image

Graph
Chart
Line chart
Bar chart
Pie chart
Flowchart
Table data
Process diagram
Picture
Presentation
Figure

Verb

- Shows
- Represents
- Depicts
- Demonstrates
- Provides
- Describes
- Compares
- Presents
- Presents information about
- Outlines
- Indicates

DESCRIBING TRENDS

www.grammar.cl
www.vocabulary.cl

Verbs to describe

rise
jump
grow
climb
go up
increase
rocket



Verbs to describe

fall
drop
decline
decrease
go down
plunge
plummet



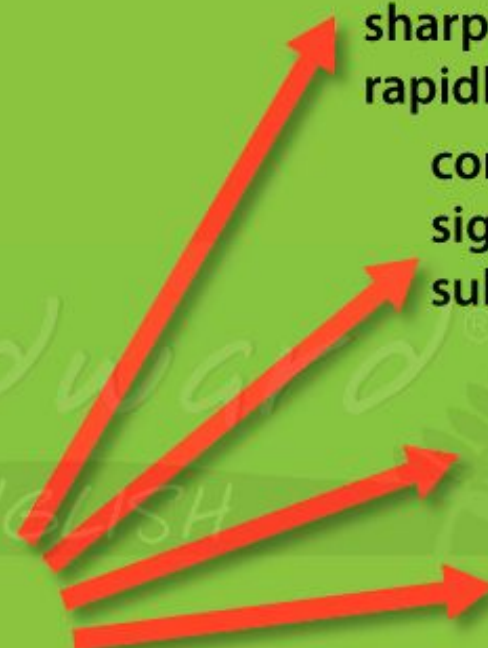
Adverbs to describe... HOW?

sharply quickly
rapidly steeply

considerably
significantly
substantially

steadily
gradually
moderately

slightly
slowly



How to describe

stay
remain
maintain

+

constant
steady
stable



Types of charts



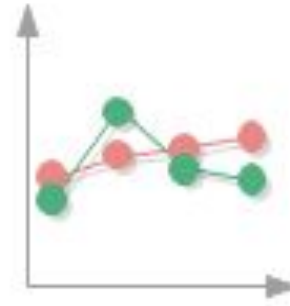
Pie



Bar



Column



Line



Area



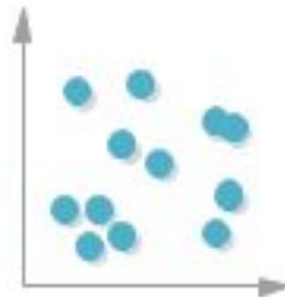
Doughnut



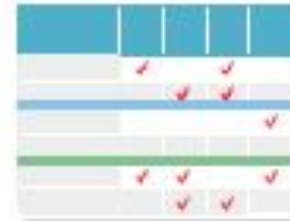
Bubble Chart



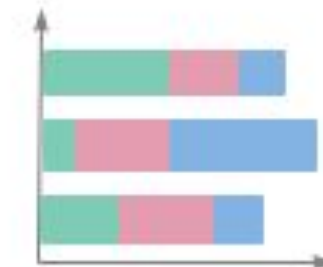
Spider and Radar



Scatter



Comparison Chart



Stacked bar chart



Gauges

LIFESTYLES AND SOCIAL PARTICIPATION

According to the Family Expenditure Survey, by 1998–99, 13 per cent of households in the United Kingdom were subscribers to satellite television, and 9 per cent subscribed to cable television. Subscription to satellite is more common than cable among the majority of social groups, especially for households headed by skilled manual people, followed by households headed by managerial, technical and professional people. Despite the increasing number of television channels in recent years, the proportion of people listening to radio has remained fairly stable, with about nine in ten people in Great Britain reporting listening in the four weeks prior to interview in the General Household Survey in 1996–97. **According to the broadcasting industry survey,** overall people spent an average of 16 hours per week listening to radio in the United Kingdom in 1998. Listening to music on home music systems is another popular leisure activity. The dramatic rise in the sales of CDs in recent years has been accompanied by falls in the sales of cassettes and LPs. Many people also enjoy reading as a leisure activity. More daily newspapers, national and regional, are sold per person in the United Kingdom than in most other developed countries, although the proportion of people reading a national daily newspaper in Great Britain has fallen since the early 1980s.

Adapted from: Matheson, J & Summerfield, C. (2000). Social Trends 30 – 2000 edition: The Stationery Office

1

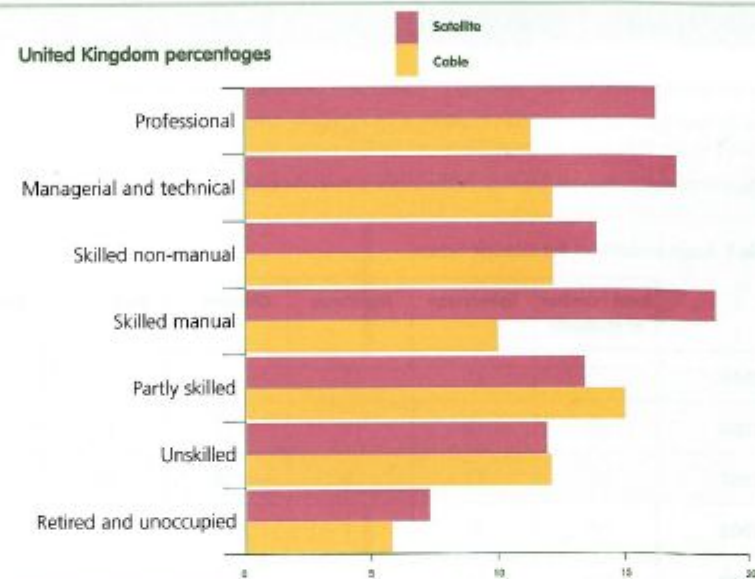
	Males (%)				Females (%)			
	1971	1981	1991	1998-9	1971	1981	1991	1998-9
The Sun	26	31	25	24	15	23	19	17
The Mirror	38	27	20	15	29	22	15	12
Daily Mail	13	13	10	12	10	11	9	12
Daily Express	28	16	8	6	20	13	8	5
The Daily Telegraph	10	9	6	6	7	7	5	5
Daily Star	N/a	13	8	5	N/a	8	4	2
The Times	3	3	3	3	5	2	2	
The Guardian	3	3	4	3	3	2	2	2
The Independent	N/a	N/a	3	2	N/a	N/a	2	1
Financial Times	3	3	2	2	2	1	1	1
Any national daily newspaper	N/a	76	66	60	60	68	57	51

Source: National Readership Surveys Ltd

2

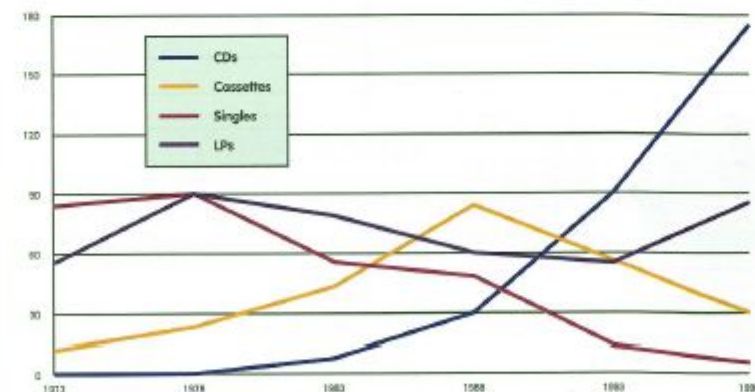
United Kingdom	Hours and minutes per week		
	Males	Females	All
4-14	5:13	6:42	5:57
15-34	18:11	15:14	16:45
35-64	19:56	16:39	18:15
65 and over	16:54	17:34	17:18
All aged 4 and over	16:42	14:59	15:50

United Kingdom percentages



Source: Family Expenditure Survey, Office for National Statistics

3



Source: British Phonographic Industry

4

Practice (https://www.youtube.com/watch?v=Rnh6O-qVs98&ab_channel=Takeiteasy)

Table 1: Asian students at the Oceanic School

	Total number of students	Taiwanese	Japanese	Chinese	Thai	Other
1999	73	15	15	9	14	20
2000	89	12	15	17	15	30
2001	107	17	9	23	13	45
2002	155	20	7	60	17	51
2003	204	19	7	93	15	70

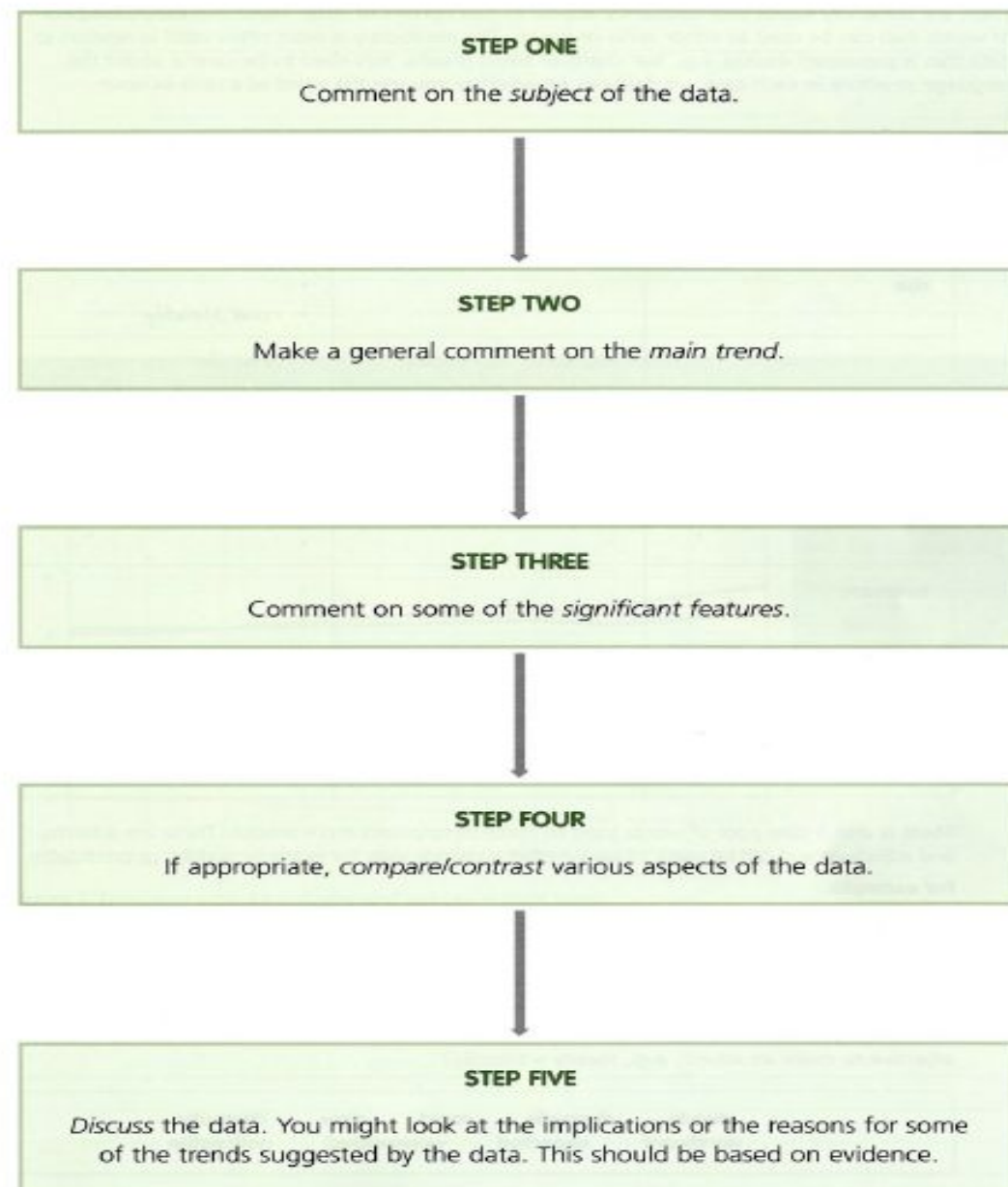
Table 1 shows the country of origin of Asian students studying at the Oceanic Language Centre. There has been a sharp increase in the number of students from Asia; the number has more than trebled since 1999. This is particularly evident in the past two years, with the huge increase in the number of Chinese students. The number of students from Japan has fallen steadily. This increase in the number of Chinese students is the result of a number of factors, perhaps including the more open policy of the Chinese government, which has made the process of obtaining a visa to study abroad less complex than in the past.

Table 1: Asian students at the Oceanic School

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Data commentary flow chart

Follow these steps when carrying out data commentary:



Conclusion:

- What is data?
- Captions (language style, position)
- Types of charts
- The language for incorporating data
- Collocations (adjective + noun; verb + adverb)
- Data commentary steps

Assignment

- Working on the main body of the scientific article (define the types of chart) - 30;
- Analyze the language style of captions and their positions - 30;
- Describe one of the chart using collocations on the basis of main flow chart steps – 30.

Don't forget to make a screen of your article - 10!