

6.1: Quiz: Do I have a good academic writing style?

Teacher's notes

Background

This task is designed to raise awareness of academic style in English at an early stage of an EAP course.

Aims

- to examine preconceptions about academic style
- to compare academic style in different cultures
- to raise awareness of aspects of organization and language which contribute to an academic style

Material

Individual copies of *Quiz: Do I have a good academic writing style?*
Individual or shared copies of the Score sheet

Procedure

- 1 Introduce the topic of writing style. Ask students if they would write in a special style when writing academic texts in their own language. Explain that this quiz is based on research into academic style in English.
- 2 Students complete the quiz individually, then check what their score means.
- 3 They discuss any differences from their preconceptions about English academic style or differences from academic style in their first language.

Follow-up

Give students examples of different texts, for example, newspapers, journal articles, and textbooks, to identify the features mentioned in the quiz, or ask them to bring texts to class from their subject area and survey these for typical features of academic style. Refer to the checklist at the end of Chapter 2 for more detail on these features. Students can write short texts in a group, and ask other students to decide if these are in an academic or non-academic style. Then they can try to write the same information using the opposite style.

Tasksheet: Quiz: Do I have a good academic writing style?

Read each question and choose the best answer for you by putting a tick ✓ next to a letter in the table below. When you have finished all the questions, check your answers over the page and add up your total score.

Q1	Q2	Q3	Q4	Q5	Q6
a	a	a	a	a	a
b	b	b	b	b	b
c	c	c	c	c	c
d	d	d	d	d	d

Q1 Which one of the following is closest to academic style?

- a a novel
- b a newspaper article
- c an advertisement
- d a letter from the bank

Q2 The best way to start an academic text is

- a with a question
- b with some new or surprising information
- c with some background details
- d with the topic of the text

Q3 The best way to keep your reader's attention in an academic text is

- a to write short sentences
- b to give familiar information first, and then new information
- c to be friendly, e.g., as in an email
- d to ask questions first, and then give the answers, e.g., as in a conversation

Q4 The best order for ideas in an academic paragraph is

- a from a general idea of the main point to specific details
- b from specific details to a general idea of the main point
- c the order in which I think of the ideas when I am writing
- d no particular order, as this does not matter

Q5 The best way to start a sentence in an academic text is

- a with some information the reader knows already
- b with some background details
- c with some new or surprising information
- d with a person or personal pronoun, e.g., We can see

Q6 The best kinds of words to use in academic writing are

- a unusual words that a reader will notice and admire
- b simple words, such as *big* and *important*, which are easy to understand
- c words such as *reason* or *similarity* which show relationships between ideas
- d special technical words which are specific to the subject I am studying

Score sheet

Answers

You can score between 0 and 3 for each question. The best answers are worth 3, but some others are still OK, and they are worth 2 or 1. Use the table below to find your score.

Q1	Q2	Q3	Q4	Q5	Q6
a = 0	a = 0	a = 2	a = 3	a = 3	a = 0
b = 2	b = 0	b = 3	b = 1	b = 2	b = 0
c = 1	c = 1	c = 0	c = 0	c = 0	c = 3
d = 3	d = 3	d = 0	d = 0	d = 0	d = 1

What does my score mean?

Less than 8: It seems you do not yet have much experience of academic writing. Perhaps you cannot see any differences in style between academic writing and other kinds of writing. Try to find some examples of academic writing in your subject. Compare the way the author writes with the questions in this quiz.

9 to 14: You have some ideas about good academic style, but it is possible that you are still remembering classes you had at school in which you studied literature (e.g., novels, poems and plays) or newspapers. You perhaps still remember some of the things your teachers told you about why these kinds of texts are effective. However, good academic writing is quite different from good literature. Try to find some examples of academic writing in your subject. Compare the way the author writes with the questions in this quiz.

15 to 18: You are probably already a good writer in your own language, and you have been using your skills to learn and use an academic writing style in English. For you, this process may even happen without you being aware of it. Your EAP course will help you to notice what you already do so that you can develop your academic writing style further.

6.2: What is research? Synthesizing from sources

Teacher's notes

Background

This series of tasks is designed to support students when they first attempt a coursework assignment which requires using information from different sources. Students are therefore introduced to the idea of synthesizing ideas from sources in a context where they need this skill. The tasks lead students through steps in which they formulate their own ideas before drawing on the ideas of others. This emphasizes the importance of students developing their own voice rather than simply reporting other authors' views.

Aims

- to introduce the idea of constructing a text which combines the ideas of other authors with students' own ideas
- to raise awareness of strategies and language for summarizing and evaluating the ideas of other authors

Material

Teacher's visual sheet: *Instructions for a dissertation*

Individual copies of the writing Tasksheet 1: *Exploring meaning*

Individual copies of the reading text: *Definitions of research*

Individual copies of the writing Tasksheet 2: *Synthesizing a definition*

Individual copies of Tasksheet 3: *Two example answers*

Individual copies of the keys for Tasksheet 3

Procedure

- 1 Ask students to brainstorm reasons for using ideas and information from other sources when they write academic texts. Show and discuss the teacher's visual sheet *Instructions for a dissertation*. Explain that they are going to use other peoples' ideas to construct a text that shows their own ideas.
- 2 Students write their own definition of research (Tasksheet 1). After comparing their ideas with other students, they write a revised one.
- 3 Students read all the definitions of research in the reading text and use these definitions, along with their own definition from Tasksheet 1, to write a text, using the framework given in Tasksheet 2. More confident students may prefer to write without the support of the framework.
- 4 Students read the model answers produced by two teachers, compare them with their own definitions, and give feedback on what they noticed (Tasksheet 3). Ask about whose voice is heard in these texts. Give out the table analyzing the model texts. Discuss the ways in which the writers use the ideas and language of the original texts to support their own definitions. Stress that, in academic writing, it is expected that people may have different interpretations of ideas and come to different conclusions, and that students' own definitions may be just as valid as those of the two teachers.

Follow-up

After this introduction, further practice in synthesizing information from different sources, including summarizing, paraphrasing and citation should be incorporated into classes. As a next step, students can bring texts they are reading for their coursework assignment, and practise identifying and summarizing important ideas from the texts.

KEY

Two example answers (Tasksheet 3)

These tables compare what the teachers wrote in Texts A and B with the original source, and comment on the way they signal their own views of these sources, and also how they paraphrase when they want to keep close to the ideas in the sources. Compare these comments with your own answers from Tasksheet 3.

Text A

Model text A	Original source	Comments
is further expanded by Nunan (1994)		<i>expanded</i> shows the writer regards Nunan's definition as more comprehensive than those in the dictionaries
who states that research is an activity requiring three elements	research is a systematic process of inquiry	use of general noun <i>activity</i> as a paraphrasing device
firstly, a question, secondly, data and finally, analysis and interpretation of data. These three elements need to be present for research.	(1) a question, problem or hypothesis, (2) data, (3) analysis and interpretation of data. Any activity which lacks one of these elements ...	Nunan's own words are used but the second sentence uses the positive form instead of the negative, as a paraphrasing device.
Her principal claim		signals that only the most important point of the definition is being considered by the writer
the academic community plays an essential part in the research process by providing a framework for regulation ...	The academic world is the guardian of this research process. ... It oversees the process of collecting information ...	<i>essential</i> signals that the writer thinks this is the core of Spencer's claim. <i>Framework</i> is a useful paraphrasing device.
is only concerned with, social research	the deliberate study of other people ...	<i>is only concerned</i> signals that the writer thinks this definition is not very relevant

Text B

Model text B	Original source	Comments
emphasize the outcome of research,	in order to discover/reach	<i>emphasize</i> indicates that the <i>outcome</i> is the most important common feature of the two definitions, in the writer's opinion
the most important characteristic of research	The minimal definition / Any activity which lacks one of these elements ...	writer has interpreted these two points as <i>the most important characteristic</i>
the systematic process of forming a question and collecting data which is then analyzed.	a systematic process of inquiry consisting of ... (1) a question, problem or hypothesis, (2) data, (3) analysis and interpretation of data.	writer has paraphrased and simplified the original
a process based definition	information is transformed into abstract concepts, ... By analyzing and looking for relationships in the abstract world, researchers can gain a useful understanding of the real world. For example they can then solve the problems or explain the phenomena.	writer has identified this passage as a description of a process, and therefore been able to connect it with Nunan's claim (using <i>also</i>). This is an example of real synthesis
but proposes a further element:		signals that the writer has identified a difference between Nunan's and Spencer's definitions
she claims		a signalling device to show that the writer may not agree with this claim
the world of the academic community also plays an essential part in the research process providing a framework for regulation ...	The academic world is the guardian of this research process ... It oversees the process of collecting information ...	Both writers used the same paraphrasing device. They had not seen each other's work. It shows that academic English does not need to be original, although the ideas should be.

Teacher B did not mention Dawson's definition. She may have considered it too irrelevant to be worth considering. Remember you do not need to include everything you come across in your reading.

Teacher's visual

Here is an extract from a dissertation guide* for university students:

In the dissertation you are expected to develop your own ideas and state your own opinions. However, the work of other people will be essential to the development of your own thoughts and ideas. You need to **identify** what ideas of other people you have drawn upon so that the examiners know how you have used these ideas in forming your own conclusions.

*Heriot-Watt School of Management and Languages Dissertation Regulations and Procedures (2005–2006)

Tasksheet 1: Writing

Exploring meaning

What is research? Why do people do it?

Think about what you mean by research. Now, with a partner, write a definition here.

Research is

Compare your definition with those written by the rest of the group.

Read the definitions written by other writers and researchers on the next page. If you have changed your ideas, write your new definition of research below.

Research is

Reading

Definitions of research

research noun [U]

a detailed study of a subject, especially in order to discover (new) information or reach a (new) understanding: scientific/medical research

Cambridge Advanced Learner's Dictionary (2003) Cambridge: Cambridge University Press

research serious study of a subject, in order to discover new facts or test new ideas

Longman Dictionary of Contemporary English (2004) Harlow: Longman

The minimal definition that I shall adhere to ... is that **research** is a systematic process of inquiry consisting of three elements or components: (1) a question, problem or hypothesis, (2) data, (3) analysis and interpretation of data. Any activity which lacks one of these elements (for example, data) I shall classify as something other than research.

Nunan, D. (1994) *Research Methods in Language Learning*. Cambridge: Cambridge University Press

For the purpose of this book, **research** is defined as the deliberate study of other people for the purposes of increasing understanding and/or adding to knowledge.

Dawson, C. (2002) *Practical Research Methods: A User-friendly Guide to Mastering Research Techniques and Projects*. England: How to Books

Academic **research** involves the interaction of three worlds. In the real world, issues, problems, things, events or phenomena are identified. The researcher then collects information about these, which can be recorded in an abstract way.

In the abstract world, information is transformed into abstract concepts, which may be mathematical (such as equations and statistics) or take the form of a system of categories. By analyzing and looking for relationships in the abstract world, researchers can gain a useful understanding of the real world. For example they can then solve problems or explain phenomena.

The academic world is the guardian of this research process. (It is like a government that makes the laws and ensures they are kept.) It oversees the process of collecting information from the real world and analyzing it through abstract and mathematical concepts. The channels of communication of the academic world are by writing and reading books and learned journals and conference reports. There are also discussion groups for specific topics (e.g., on the internet), seminars, conference presentations and lectures.

Spencer, J. A. (2005) (unpublished paper) *What is academic research?* School of Management and Languages, Heriot-Watt University

Tasksheet 2: Writing

Synthesizing a definition

Use the framework below to write a definition of research based on those given in *Definitions of research*, as well as your own ideas. List the references at the end.

What is research?

Both the Cambridge Advanced Learner's Dictionary (2003), and

_____ define research as

This fairly general definition is further expanded by _____, who believes that

Spencer (2006) does not actually define research, but looks at

Her principal claim is that

Dawson (2002) is only concerned with

In this paper, therefore, *research* will be used to mean

References:

Tasksheet 3

Two example answers

Text A was written by a teacher using the framework you were given. Text B was written by another teacher who has used a different framework, to suit her own definition. How is each one different from your definition of research?

Compare the sections in bold with the definitions by the original authors, and underline the same information in those definitions. How have teachers A and B summarized information and shown how it is important or relevant? How many exact words and phrases from the source have they used? Whose voice do you hear in these extracts?

Model text A

Both the Longman Dictionary (2004) and the Cambridge Advanced Learner's Dictionary (2003) define research as a 'detailed' or 'serious study of a subject' which takes place 'in order to discover new information'. This fairly general definition is **further expanded by Nunan (1994) who states that research is an activity requiring three elements: firstly, a question, secondly, data and finally, analysis and interpretation of data. These three elements need to be present for research.** Spencer (2005) does not actually define research, but looks at how academic research involves the interaction of three 'worlds', notably the 'real world', the 'abstract world' and the 'academic world'. **Her principal claim is that the world of the academic community plays an essential part in the research process by providing a framework for regulation and communication of the research.** Dawson (2002) is only concerned with **social research** and her definition is therefore too limited in application. Nunan's and Spencer's definitions are more appropriate to academic research in that they stress, respectively, the process of research and the academic context. In this paper, therefore, research will be used to mean a systematic process of identifying a question, followed by collecting and analyzing data. The research is set in an academic context by being related to other academic research and theories, and is then assessed by other members of the academic community.

Model text B*

Simple dictionary definitions of research given in the Cambridge Advanced Learner's Dictionary and the Longman Dictionary of Contemporary English **emphasise the outcome of research**, which is the discovery of new information or reaching a new understanding. However, according to Nunan (1994), **the most important characteristic of research is the systematic process of forming a question and collecting data which is then analyzed.** Spencer (2005) also suggests **a process based definition but proposes a further element: she claims that the world of the academic community also plays an essential part in the research process providing a framework for regulation and communication of the research activity.** For the purposes of this paper, the discussion will focus on what has been learnt from undertaking the research process.

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6.3: Noun phrases for referring to data

Teacher's notes

Background

This series of tasks is designed to raise awareness of the role of noun phrases in labelling and explaining data. These exercises are designed to promote fluency in writing, by giving students the resources to construct texts that use a general to specific development to comment on data. The focus is on data that represents change, and also proportion. The tasks are based on two separate sets of data, so they could be separated and done on different occasions.

Aims

- to identify noun phrases that explain precisely what data represents
- to identify noun phrases that carry the general to specific development of a text
- to practise constructing noun phrases to explain items of data

Material

Individual copies of Tasksheet 1 concerning the growth of exports in the world economy (Tasks 1 and 2)

Individual copies of Tasksheet 2 concerning the market share in world merchandise trade (Tasks 3 and 4)

Procedure

- 1 Introduce the topic of international trade. Ask how economic growth and success can be measured. Check students' understanding that exports represent success in trade, and GNP is a way economists measure a country's wealth. Give out the table (Task 1). Students discuss the big picture and their interpretation of the table with each other before checking with the teacher. Emphasize the importance of being clear about what data represents, and the consequences, for example, in an exam, of not making it clear if figures refer to the amount of growth or the rate of growth. Ask questions about the tables so that students practise talking about the data orally. Introduce the idea of precise noun phrases that contain all the information to specify an item of data.
- 2 Students identify noun phrases referring to the data in the table. Draw students' attention to the way verbs of change can be nominalized to create noun phrases (*grow* → *growth*). Explain that, although these kinds of noun phrases in English seem rather long and difficult to construct, they are essential to represent the data accurately. Students construct their own noun phrases (Task 2), and compare these with those written by other class members and with the keys. It is important to stress that the answers are suggestions and students may have produced other correct alternatives.
- 3 Elicit what the pie charts represent (Task 3). Make sure that students are clear that these represent the share of total world trade and that, by comparing the two charts, we can see the changes in the shares of different countries or groups. Students read the accompanying text to find the main point that the writer wants to make about the data charts, and discuss the answers. Emphasize the fact that this data commentary does not merely describe data, but explains its significance, through highlighting statements and words such as *important* and *significantly*.

- 4 Students highlight the noun phrases that carry the flow of information (Task 4). When they check their answers with the key, point out that the noun phrases to identify exactly what is referred to become more specific as the writer moves from explaining general trends to specific details. Explain that this is a good way to plan texts. It is like the opening of a movie, where we see a big city, then one busy street in the city, and then a close-up view of one of the people in the street. We know where this person is and where the story takes place, and this helps our understanding.
- 5 Students then try to write their own sentences to explain data in the text, and compare them with the suggested answers.

Follow-up

Students can work on other sets of data in the same way, constructing noun phrases, then sentences, to explain data and, finally, writing short texts highlighting significant data, following a general to specific framework.

Students can identify the prepositions (*by, at, to, from*) that link the verbs for change (*grow, rise*) to the mathematical expressions and record these as collocations.

KEY

Task 1

- a The amount of exports was greater in 1996. This is because the data show the *average annual percentage growth* for the exports. According to Table 1, in each period there was growth relative to the previous period. This means that the total amount of exports was much greater in 1996, even though the rate of growth was not as fast as it had been in the 1960s and 70s. This question shows how important it is to be able to refer precisely when explaining data. Confusion between the amount of exports and the rate of growth of exports could lead to failure in an exam.
- b
- 1 In the 1980s, GDP in the less developed countries grew by only 1.8% per year on average.
 - 2 The average annual growth of exports from Eastern Europe rose from 4.4% to 7.4% between 1990 and 1996.
 - 3 During the 1960s, world GDP was growing on average at 5.2% per year.
 - 4 The 1980s marked a further lowering of the rate of growth of world trade to a yearly average rate of 4.1 per cent.
 - 5 The average annual rate of growth of exports in the developed market rose to 6.3% in the 1990s from 3.9% in the previous decade.

Task 2

- a
- 1 In the 1980s, the average annual percentage change in GDP for the less developed countries was only 1.8.
 - 2 In the 1980s, GDP in the less developed countries grew by only 1.8% per year on average.
 - 3 In the 1980s, growth in GDP in the less developed countries averaged only 1.8% per year.
 - 4 In the 1980s, annual percentage change in GDP averaged only 1.8.
- b **Suggested answers**
- A Between 1961 and 1970, the annual average growth in world exports was over 8%.
or
World exports grew by over 8% on average each year during the period 1961 to 1970.
- B During the 1970s, the annual average growth in GDP in the developed market was 3.2%.
or
During the 1970s, GDP in the developed market grew by 3.2% annually, on average.
- C Between 1990 and 1996, the average annual growth in exports from the less developed countries was almost 12%.
or
Exports from the less developed countries rose by almost 12% each year, on average, between 1990 and 1996.

- D Between 1990 and 1996, annual growth in GDP in the East European countries averaged only 2.0%.

or

Between 1990 and 1996, the average growth in GDP in the East European countries was only 2.0% each year.

(There may be other possible answers. They should include phrases to indicate that the growth is annual and average.)

Task 3

Suggested answers

- a 1996 (The use of 1996\$ is to allow for inflation over such a long period.)
- b The share of world trade accounted for by the seven major economies has fallen over the period compared to that of other countries (signalled by *Significantly*).

Task 4

- a The period since the 1960s has seen some important changes in 1 the global distribution of international trade. The general trends are shown by Figure 5.4.2. By the mid-1990s, 2 the volume of world merchandise trade had risen more than fourfold. Significantly, 3 the share of world trade accounted for by the seven major economies has fallen over the period, from 54 per cent in 1966 to 47.5 per cent in 1996. Within the group of rich countries, some countries have performed better than others over the period. In particular, 4 the share of world merchandise trade accounted for by Japan has increased sharply, from 5 per cent of the total in 1966 to almost 9 per cent in 1996. On the other hand, 5 the share of world trade accounted for by the UK fell from 8 per cent in 1966 to slightly under 5 per cent in 1996.

b Suggested sentences

- 1 In 1996, the volume of world merchandise trade was \$4,214 billion.
- 2 Over the period from 1966 to 1996, the share of world (merchandise) trade accounted for by the rest of the world, that is countries other than the seven major economies, rose from 46% to 52%.
- 3 Between 1966 and 1996, the share of world (merchandise) trade accounted for by Germany remained the same, at 10%.
- 4 In 1966, both Japan and Canada had the same share of world (merchandise) trade, at 5%.
- 5 In 1996, Canada, France, Italy and the UK each shared a similar proportion of world (merchandise) trade.
- 6 By 1996, the global distribution of world (merchandise) trade had changed considerably, with the rest of the world accounting for a larger share than the seven major economies.

Tasksheet 1

The growth of exports in the world economy

Task 1

- a Read the title of Table 1 carefully, and use the information in Table 1 to answer this question:

Was the total amount of exports in the world greater in 1996 or in 1961?

Table 1: *Growth of exports in the world economy, 1961–96 (average annual percentage change)*

Country group	Year	Exports	GDP*
World	1961–70	8.1	5.2
	1971–80	5.3	3.8
	1981–89	4.1	3.0
	1990–96	7.2	3.7
Developed market	1961–70	8.1	4.9
	1971–80	6.0	3.2
	1981–89	3.9	2.7
	1990–96	6.3	2.9
Less developed	1961–70	8.0	5.9
	1971–80	3.2	5.0
	1981–89	2.6	1.8
	1990–96	11.8	3.0
East Europe	1961–70	8.3	7.2
	1971–80	7.2	4.8
	1981–90	4.4	4.4
	1990–96	7.4	2.0

- b Here are sentences explaining the data in Table 1. In each sentence, highlight the noun phrases which define exactly what has changed.

Hint: They form the subject of the verb in each sentence except 4.

- 1 In the 1980s, GDP in the less developed countries grew by only 1.8% per year on average.
- 2 The average annual growth of exports from Eastern Europe rose from 4.4% to 7.4% between 1990 and 1996.
- 3 During the 1960s, world GDP was growing on average at 5.2% per year.
- 4 The 1980s marked a further lowering of the rate of growth of world trade to a yearly average rate of 4.1 per cent.
- 5 The average annual rate of growth of exports in the developed market rose to 6.3% in the 1990s from 3.9% in the previous decade.

*GDP is Gross Domestic Product, a measure of the wealth produced by a country from its manufactures and services.

Task 2

- a Complete each sentence below so that it has exactly the same information and meaning as sentence 1. Add a suitable noun phrase in each gap.

Hint: Check which information from the noun phrase in 1 is already included in each sentence.

- 1 In the 1980s, the average annual percentage change in GDP for the less developed countries was only 1.8.
- 2 In the 1980s, _____ grew by only 1.8% per year on average.
- 3 In the 1980s, _____ averaged only 1.8% per year.
- 4 In the 1980s, _____ averaged only 1.8.

- b Write one sentence explaining each of the figures underlined in the table below.

Table 2: *Growth of exports and GDP in the world economy, 1961–96 (average annual percentage change)*

Country group	Year	Exports	GDP
World	1961–70	<u>8.1 (A)</u>	5.2
	1971–80	5.3	3.8
	1981–89	4.1	3.0
	1990–96	7.2	3.7
Developed market	1961–70	8.1	4.9
	1971–80	6.0	<u>3.2 (B)</u>
	1981–89	3.9	2.7
	1990–96	6.3	2.9
Less developed	1961–70	8.0	5.9
	1971–80	3.2	5.0
	1981–89	2.6	1.8
	1990–96	<u>11.8 (C)</u>	3.0
East Europe	1961–70	8.3	7.2
	1971–80	7.2	4.8
	1981–90	4.4	4.4
	1990–96	7.4	<u>2.0 (D)</u>

Tasksheet 2

The global distribution of world trade

Task 3

Seeing the big picture

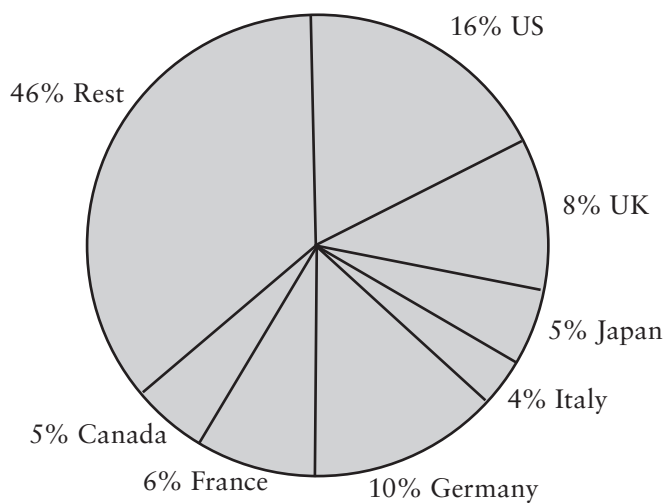
- Look at the two pie charts on the next page. Was the total amount of world trade greater in 1966 or in 1996?
- Read the text below that comments on the charts. What is the most important change that the writer wants readers to notice about the data?

The Global Distribution of World Trade*

The period since the 1960s has seen some important changes in the global distribution of international trade. The general trends are shown in Figure 2. By the mid-1990s the volume of world merchandise trade had risen more than fourfold. Significantly, the share of world trade accounted for by the seven major economies has fallen over the period, from 54 per cent in 1966 to 47.5 per cent in 1996. Within the group of rich countries, some countries have performed better than others over the period. In particular, the share of world merchandise trade accounted for by Japan has increased sharply, from 5 per cent of the total in 1966 to almost 9 per cent in 1996. On the other hand, the share of world trade accounted for by the UK fell from 8 per cent in 1966 to slightly under 5 per cent in 1996.

*Adapted from Heriot-Watt Management Programme *International Economics*: Chapter 1: The Global Economy

1966 \$1,000 billion (1996 \$)



1996 \$4,214 billion (1996 \$)

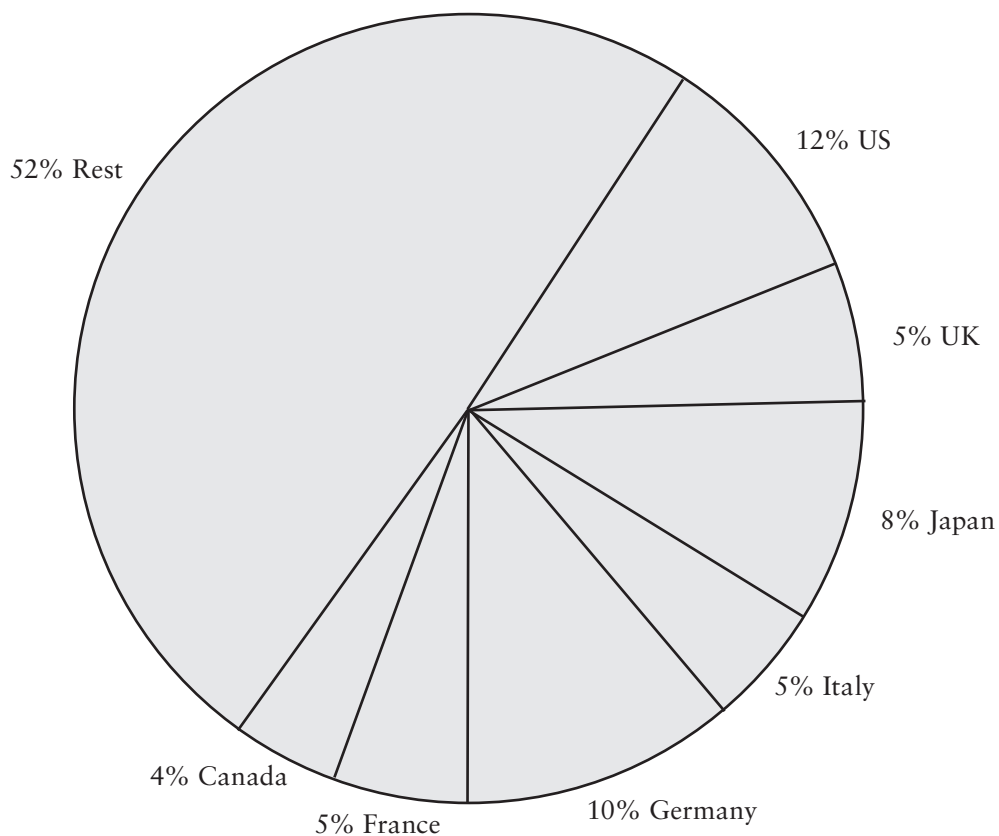


Figure 1: Market share in world merchandise trade 1966/1996

Task 4

- a In the text *The Global Distribution of World Trade*, highlight noun phrases which have the same meaning as phrases 1 to 5 below.
 - 1 How international trade is distributed between different countries in the world.
 - 2 How much merchandise trade there is in the world.
 - 3 What share of the total world trade the seven major economies have.
 - 4 What part of the total trade in the world Japan has.
 - 5 What part of the total trade in the world the UK has.
- b Use information from Figure 1: *Market share in world merchandise trade* to complete these sentences using appropriate noun phrases.
 - 1 In 1996, the _____ was \$4,214 billion.
 - 2 Over the period from 1966 to 1996, _____, that is countries other than the seven major economies, rose from 46% to 52%.
 - 3 Between 1966 and 1996, _____ Germany remained the same, at 10%.
 - 4 In 1966, both Japan and Canada had the same _____, at 5%.
 - 5 In 1996, Canada, France, Italy and the UK each had a similar proportion of _____.
 - 6 By 1996, the _____ had changed considerably, with the rest of the world accounting for a larger share than the seven major economies.

6.4: A class profile: collecting and commenting on data

Teacher's notes

Background

This series of tasks is designed to explore the three basic aspects of academic writing: writing for a purpose, writing for an audience, and writing from sources. The task-based approach leads students through steps of collecting, selecting and organizing information appropriate for the reader and the purpose. These activities can also act as a purposeful version of a get-to-know-you task, at the beginning of a course. The materials can take between 4 and 6 hours of class time, depending on the level of the class and the amount of work completed at home.

Aims

- to collect information and organize data to suit a particular purpose and reader
- to practise grouping information in ways which will be helpful to the readers
- to introduce the concept of general to specific order in academic writing
- to introduce the idea of highlighting statements in a data commentary

Material

Individual copies of Task 1a or 1b of the writing tasksheet

Individual copies of the questionnaire table (if needed)

Unmarked individual copies of students' own texts (in the second lesson)

Individual copies of the teacher's model answer

Keys for highlighted model answer (a sample model answer is provided but the teacher can write one or use a good student example)

Procedure

- 1 Give out the writing tasksheet with the description of the purpose of the report. Task 1a is designed to enable students who may not have much academic experience to find out more general information about one another's background and intentions. Task 1b is more authentic, as its purpose is real – to write a report on information the teacher needs. It is suitable for students who have some previous experience of university study or English-medium learning. Check that students understand the writing purpose, and the needs of the particular reader. Ask students to form groups to draw up a list of questions to obtain suitable information for the reader. If the class is at a lower level or if time is short, the pre-prepared questionnaire, *A class profile* (Task 1a), can be used, but groups should evaluate it by adding one or two questions of their own to the list, or deleting questions they think are not relevant to the purpose.
- 2 The whole class reports back and evaluates the questions each group has chosen. The class decides on a final list of questions to ask.
- 3 In groups, students interview other students and record their answers. If the class is small, students can interview the whole class in this way. For larger classes, the teacher can photocopy the completed sheets for each group and distribute them to the other groups.

- 4 Students write individual reports or collaborate in groups to compose texts.
- 5 Photocopy students' individual texts before marking them. In the next lesson, give out the model answer, and draw attention to the general to specific structure. Ask students to highlight in one colour the general highlighting statements that form the narrative, then mark the supporting details in another. Ask students to do the same in their own unmarked texts before giving back the marked texts and any further feedback.
- 6 Ask students to identify useful expressions for writing about data (e.g., *the majority of ...*) that they find in their own texts and the model text.

Follow-up

Students write parallel texts from other data sources, such as tables supplied by the teacher. They should routinely highlight their texts to identify highlighting statements to make sure their own voice is heard in the text. They should also check the general to specific organization and other frameworks they use such as problem–solution–evaluation.

KEY

Sample model report and notes

(General highlighting statements are in **bold**. Supporting details are underlined.)

The postgraduate writing class consists of nine students. **There are four Chinese speakers** from the PRC and the remainder are Arabic speakers from Saudi Arabia, Libya and Algeria.

The students have a wide range of first degrees. Most of their proposed postgraduate degrees are closely related to their bachelor degree subjects. There are two maths graduates who intend to study Actuarial Maths and Applied Maths respectively. There are two business graduates both of whom will take the MSc in International Business and Marketing. The remaining students have first degrees in Architecture (progressing to a M.Phil in Hospital Construction), Civil Engineering (MSc in Construction Management), and Software Management and Development (MSc in IT and Computer Science).

The majority of students hope to find employment in academic or commercial fields in their own countries after completing their postgraduate degrees. However, one student would like to gain experience in the UK IT sector before returning to China.

There is a strong interest in business topics in this group. A Background Studies option comprising Cultural Studies, an Introduction to Maths or Introduction to Business is offered to Foundation students in the second and third terms. Apart from the intending Applied Maths student, who wishes to take the maths option, all the students have chosen the business option.

Notes

In paragraph 2, the writer makes two separate claims, but integrates the supporting data to show both the wide range of degrees and their close relationship with the first degree subjects.

Students may argue that the statement in paragraph 3 does not actually support the claim. However, the fact that there is only one exception supports the use of the word *majority*.

The only information that does not use the data to support the claim is in the final paragraph. This extra information is to help the target reader. The staff in the admissions or marketing offices may not know or recollect the exact details of each course provided in the university.

Tasksheet: Writing

Task 1

- a The university marketing officer has asked for a report on the type of students attending EAP Courses to help in preparing international publicity materials for the university courses, and also to investigate the facilities required by international students during their studies.

Together with your group, devise a questionnaire to collect suitable information for this report.

Collect information from students in the class, using the questionnaire.

Using your notes, write a report about the class for the marketing officer. Think about what would be useful for the marketing department to know.

Write about 200–300 words.

- b Your EAP teacher would like a report from the class to help in preparing a suitable course programme which reflects the students' needs and previous experience.

Together with your group, devise a questionnaire to collect suitable information for this report.

Collect information from students in the class, using the questionnaire.

Use your notes to write a report about the class for your EAP teacher. Think about what would be useful for your teacher to know about the students in order to prepare a suitable course.

Write about 200–300 words.

Task 1

a Questionnaire: A class profile

Find out about ...

Name				
leisure activities they would like to take part in at university				
previous academic subjects				
why they chose this university/ town/country				
proposed degree subject				
first language				
type of accommodation they are staying in while they are studying				
what they would like to do after they finish their degree				
nationality				
previous work or professional experience				

Sample model answer

Report

The postgraduate writing class consists of nine students. There are four Chinese speakers from the PRC and the remainder are Arabic speakers from Saudi Arabia, Libya and Algeria.

The students have a wide range of first degrees. Most of their proposed postgraduate degrees are related to their bachelor degree subjects. There are two maths graduates who intend to study Actuarial Maths and Applied Maths respectively. There are two business graduates both of whom will take the MSc in International Business and Marketing. The remaining students have first degrees in Architecture (progressing to a M.Phil in Hospital Construction), Civil Engineering (MSc in Construction Management), and Software Management and Development (MSc in IT and Computer Science).

The majority of students hope to find employment in academic or commercial fields in their own countries after completing their postgraduate degrees. However, one student would like to gain experience in the UK IT sector before returning to China.

There is a strong interest in business topics in this group. A Background Studies option comprising Cultural Studies, an Introduction to Maths or Introduction to Business is offered to Foundation students in the second and third terms. Apart from the intending Applied Maths student, who wishes to take the maths option, all the students have chosen the business option.

6.5: The demand for chocolate cakes: graphical presentation

Teacher's notes

Background

This series of tasks is designed to take students through steps in studying the language and organization of texts which use mathematical notation or graphs to explain causal relationships.

Aims

- to study the language and organization of texts which explain equations or graphs
- to write a short text explaining a graph representing a causal relationship

Material

Individual copies of Tasksheet 1, *The demand for chocolate cakes: a mathematical explanation*

Individual copies of the reading text, *The demand for chocolate cakes: graphical presentation* and the tasksheet

Individual copies of the gapped summary of the text (Tasksheet 2, Task 3)

A prompt for students' parallel writing (Tasksheet 2, Task 4)

Individual copies of the keys for the vocabulary record sheet and the gapped summary (and of the model answer for Task 4, if wished)

Procedure

- 1 Ask students about luxury food items. What would make people buy more or fewer? What would lead manufacturers to produce more or fewer cakes?
- 2 Explain that they are going to read about how complex economic relationships in the real world can be expressed in mathematical formulae. However, they will not need to understand any maths or economics to answer the questions, only the language in the text.
- 3 Students read the text, *The demand for chocolate cakes: a mathematical explanation*, and answer the questions (Task 1). When checking the answers, point out that the text is about how a causal relation in the real world is represented mathematically.
- 4 Explain that a graph records data or mathematical relationships in a visual form. Students are going to read about how the same economic relationship can be represented on a graph. Students read the text *The demand for chocolate cakes: graphical presentation* and answer the big picture question. They then identify the relationships shown in the graph and the language used to show these. Discuss the pattern they notice after highlighting the text in which the description of the graph is followed by the explanation of the causal relationship in the real world and how the two are linked by verbs (e.g., *reveals*, *depicts*). They then record the vocabulary for explaining this type of graph on the vocabulary record sheet (Task 2c).
- 5 Students complete the summary of the text (Task 3). They then transfer their understanding to a new context by drawing a graph of the relationship of price and supply, and writing a commentary, individually or as a group writing task (Task 4). Finally, they compare their texts with the model text and highlight phrases or sentences which explain the real world relationship, as they did for the original text.

Follow-up

Students can find and bring in examples of graphs from their subjects to analyze the patterns in texts which are used to explain them, and add further examples of language used. They then write parallel texts explaining these graphs.

KEY

Task 1

The demand for chocolate cakes: a mathematical explanation

a Seeing the big picture

- 1 price
- 2 cause: independent variable effect: dependent variable
- 3 independent variable = price
dependent variable = demand (the number of cakes bought)

b Language study

is a result of – is dependent on/is a function of

can be calculated – it is possible to determine

The present tense is used in explaining the equation because this is a general causal relation which is presumed to be true in all cases.

Task 2

The demand for chocolate cakes: graphical presentation

a Seeing the big picture

- 1, to explain a type of graph often used in economics, using an example

b Understanding the real world relationships

(Economic causes and effects are highlighted.)

The demand for chocolate cakes: graphical presentation*

To illustrate an economic relationship graphically, two sets of information are needed: the data on the independent variable and the data on the dependent variable. In the example on the consumption of cakes, the independent variable is price, and the dependent variable is the quantity of chocolate cakes demanded. The graph of the relationship is presented in Figure 1. Price is plotted along the vertical axis and the demand for cakes along the horizontal axis.

Point a, the point on the price axis, reflects the fact that there is no demand for chocolate cakes at a price of £6 and above. Point b, found by measuring 5 units (£5) along the y-axis and 2 units (2 chocolate cakes) along the x-axis, reveals that there is demand for 2 cakes at a price of £5. Joining all the points together provides a straight line which depicts the relationship between the price of chocolate cakes and the demand for them. Because the line slopes downwards from left to right, it is said to have a negative slope, i.e., the variables move in opposite directions. As the price falls, there is an increase in the quantity demanded. The negative slope is in contrast to that for the supply of chocolate cakes, which would have a positive slope. The variables would go in the same direction because, as the price of chocolate cakes increased, more chocolate cakes would be supplied.

Notice the pattern in which the writer begins the explanation by drawing the reader's attention to a feature of the graph and then gives the explanation of what this means in the real world situation. Verbs such as *illustrate*, *reflects*, *reveals*, *depicts* signal the link between the graphical representation and the real world.

c Language study

Vocabulary record sheet

nouns: names of parts of a graph	axis/axes, origin, line, points, slope
verb = <i>constructed</i> a graph	plotted
verb = <i>produces</i> a line on a graph	generates
verbs linking graphs with the real world	illustrate, reflects, reveals, depicts
adjective: relationship represented by a straight line	linear
noun–adjective collocations	horizontal axis vertical axis a straight line positive slope negative slope
fixed phrase = <i>relation between real size and size on graph</i>	in scale

Task 3

Summary

Economists can represent the formula for the demand for chocolate cakes by plotting the price along/on the vertical axis and the quantity of chocolate cakes sold, that is the demand, along the horizontal axis. Figure 1 represents the relationship between price and demand. The points on the graph represent/show the number of cakes sold at each price. The straight line which is generated illustrates/depicts/shows the relationship between the price of the cakes and the demand. The line has a negative slope, because the variables move in opposite directions.

Task 4

The supply of chocolate cakes: model answer

Figure 2 represents the relationship between the price of chocolate cakes and the supply. The price is plotted along the vertical axis, and the quantity of chocolate cakes manufactured, that is the supply, is plotted along the horizontal axis. Point *a* reflects the fact that, at a price of less than £1, the manufacturers would not supply any chocolate cakes. The straight line has a positive slope, because, as the price increases, more chocolate cakes are supplied by the manufacturers.

Tasksheet 1: Reading

The demand for chocolate cakes: a mathematical explanation

Task 1

a Seeing the big picture

- 1 Read the text quickly and find a factor in the real world which affects the demand for chocolate cakes. Do not use a dictionary.
- 2 The text explains that dependent and independent variables have a causal relationship. Which variable is the cause and which is the effect?
- 3 In the case of the demand for chocolate cakes, what is the independent variable and what is the dependent variable?

The demand for chocolate cakes: a mathematical explanation*

Mathematical notation can be used to present or explain an economic relationship. The relationship between the price of and the demand for chocolate cakes can be presented as:

Demand for chocolate cakes = f (Price of chocolate cakes)

$$D = f(P_c)$$

The demand for chocolate cakes is dependent on, or a function of, the price of chocolate cakes, where D and P_c represent the demand for and the price of chocolate cakes, and f represents the functional relationship between price and demand.

This statement says, in a general form, that demand for cakes is a function of the price of cakes. Demand is on the left-hand side of the equation as it is the dependent variable, while price is on the right-hand side as it is the independent variable. This statement implies that if the value of the independent variable, the price, is known, then it is possible to determine the level of the demand for cakes.

b Language study

Find two expressions in the text which have a similar meaning to is a result of.

Find an expression that means the value of something can be calculated.

What verb tense is used in explaining the equation? Why is this used?

*Adapted from Heriot-Watt Management Programme *Microeconomics*, Chapter 1: Economic Issues, Concepts and Tools

The demand for chocolate cakes: graphical presentation

Many models can be presented in a relatively simple form by using graphs. The most commonly used graph in economics is constructed with two axes. The vertical axis is generally described as the y-axis and the horizontal axis as the x-axis.

Units of quantity for one economic variable are measured in scale along each axis, starting from the origin, which generally represents zero for both variables. A distinction is made between the independent and dependent variable. As its name suggests, the dependent variable relies for the determination of its value (or values) on the independent variable whose value (or values) is determined outside the model.

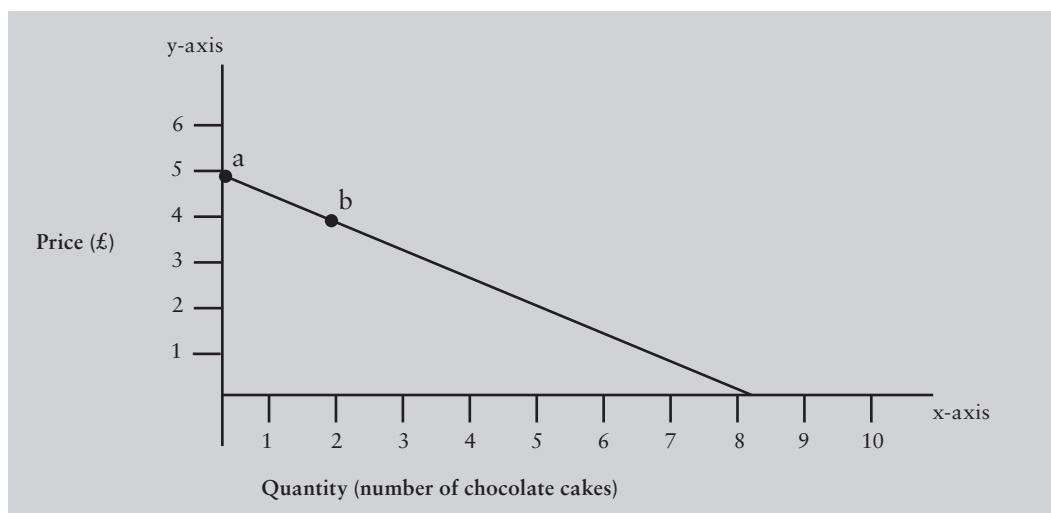


Figure 1: *The demand for chocolate cakes*

To illustrate an economic relationship graphically, two sets of information are needed: the data on the independent variable and the data on the dependent variable. In the example on the consumption of cakes, the independent variable is price, and the dependent variable is the quantity of chocolate cakes demanded. The graph of the relationship is presented in Figure 1. Price is plotted along the vertical axis, and the demand for cakes along the horizontal axis.

Point a, the point on the price axis, reflects the fact that there is no demand for chocolate cakes at a price of £5 and above. Point b, found by measuring 4 units (£4) along the y-axis and 2 units (2 chocolate cakes) along the x-axis, reveals that there is demand for 2 cakes at a price of £4. Joining all the points together provides a straight line which depicts the relationship between the price of chocolate cakes and the demand for them. Because the line slopes downwards from left to right it is said to have a negative slope, i.e., the variables move in opposite directions. As the price falls, there is an increase in the quantity demanded. The negative slope is in contrast to that for the supply of chocolate cakes, which would have a positive slope. The variables would go in the same direction because, as the price of chocolate cakes increased, more chocolate cakes would be supplied.

(Adapted from Heriot-Watt Management Programme *Microeconomics*, Chapter 8: The Factor Markets and Income Distribution)

Task 2

a Seeing the big picture

Read the text *The demand for chocolate cakes: graphical presentation* quickly to answer the following question.

Which statement, 1, 2 or 3, best describes the purpose of the text Graphical presentation?

- 1 To explain a type of graph often used in economics, using an example
- 2 To calculate the value of the demand for chocolate cakes using a graph
- 3 To explain to students how to draw a graph

b Understanding the real world relationships

Highlight sentences or phrases where the writer is talking about relationships in the real world and economic causes and effects.

c Language study

Find words and expressions in the text to complete this table.

Vocabulary record sheet

nouns: names of parts of a graph	a _____ / _____ es, o _____, l _____, p _____, s _____
verb = <i>constructed</i> a graph verb = <i>produces</i> a line on a graph verbs linking graphs with the real world	p _____ g _____ i _____, r _____, r _____, d _____
adjective: relationship represented by a straight line	l _____
noun–adjective collocations	_____ axis _____ axis a _____ line _____ slope _____ slope
fixed phrase = <i>relation between real size and size on graph</i>	in scale

Tasksheet 2: Writing

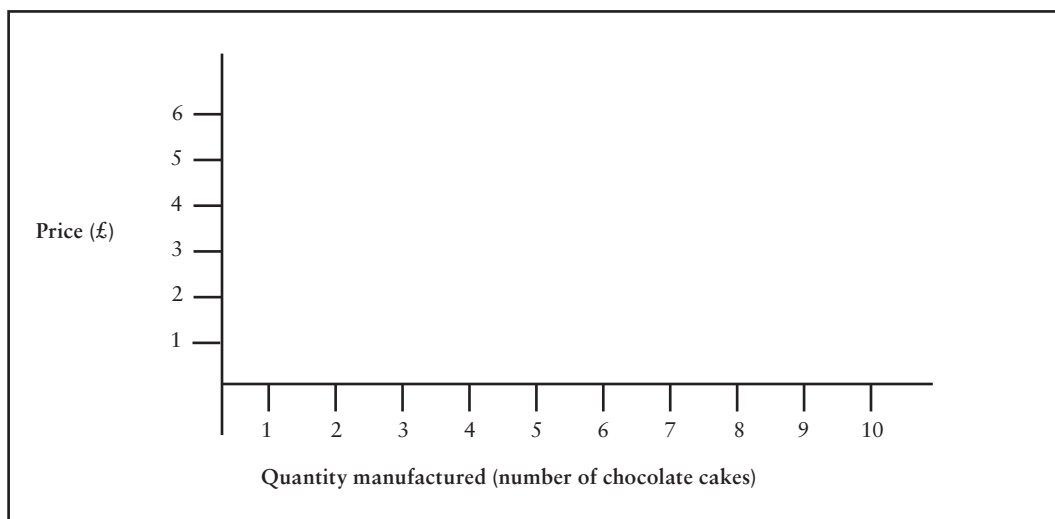
Task 3

Complete this summary which explains the graph for the demand for chocolate cakes. Add one word in each gap.

Economists can _____ the formula for the demand for chocolate cakes by plotting the price _____ the vertical axis and the quantity of chocolate cakes sold, that is the _____ along the _____ axis. Figure 1 represents the relationship between _____ and _____. The points on the graph _____ the number of cakes sold at each price. The _____ line which is generated _____ the relationship between the price of the cakes and the demand. The line has a negative _____ because the variables move in opposite directions.

Task 4

Figure 1 in the text represents the demand for chocolate cakes. On the graph below draw a line to represent the supply of chocolate cakes. Write a paragraph explaining your graph.



6.6: Quiz: Mathematical expressions

Teacher's notes

Background

This brief task is designed to make students aware that they need to know the English expressions used for mathematical symbols and expressions. They will meet them in lectures and reading texts, and may need to use them in their writing when commenting on data in graphical or numerical form.

Aims

- to check knowledge of English terms for mathematical expressions and symbols
- to identify other mathematical expressions or symbols for which students may need the English terms

Material

Individual copies and keys for *Quiz: Mathematical expressions*

Procedure

- 1 Elicit examples of mathematical expressions students expect to meet in their area of study. Students can write them on the board if they do not know the names for them. Ask if students learnt the English words for these at school. Explain that they have the opportunity to check which ones they know already.
- 2 Students complete the quiz individually or in groups then check the key and fill in correct answers so that the quiz sheet becomes a reference sheet.

Follow-up

Revise these terms as games and warmers in future lessons. For example, two teams can devise a few equations and dictate them to a member of another team, who must write the equation correctly on the board.

Students can use the hint on the Key to prepare a list of other symbols they need to know the names for, e.g., α , β (alpha, beta) to add to the reference sheet. The teacher and students can research together (e.g., by asking science staff) to find the names of any terms that the teacher is not familiar with.

Quiz: Mathematical expressions

KEY

Words or phrases	Mathematical expressions or symbols	Words or phrases	Mathematical expressions or symbols
units	metres, grams, \$	a number	1,254 1.254
6 digits	01-05-32	an amount of money	£1,254
fractions	$\frac{1}{2}$ $\frac{3}{4}$ $\frac{7}{3}$	an amount of rice	220 kg
half	$\frac{1}{2}$	the value of a car	£1,254
per cent	%	a decimal number	1.254
brackets	()	three-quarters	$\frac{3}{4}$
plus	+	an equation	$Y = C + I$, $D = f(P, Y)$, $3 + 9 - 2 = 10$
minus	-	divided by	\div
equals	=	multiplied by	x
is	=	a formula	$Y = C + I$, $D = f(P, Y)$
pi	π	the square root of	$\sqrt{\quad}$

Hint:

Go to insert on the Windows™ toolbar. Find *insert symbol*. Look at the mathematical symbols and the Greek letters (small case). Which ones are used in your subject area? Do you know the English words for them?

Tasksheet: Quiz: Mathematical expressions

Below is a list of English words or phrases used to represent **mathematical expressions, operations or symbols**. Match each example in the box to an appropriate word or phrase on the list. Some of the examples match more than one word or phrase.

Words or phrases	Mathematical expressions or symbols	Words or phrases	Mathematical expressions or symbols
units		a number	
6 digits		an amount of money	
fractions		an amount of rice	
half		the value of a car	
per cent		a decimal number	
brackets		three-quarters	
plus		an equation	
minus		divided by	
equals		multiplied by	
is		a formula	
pi		the square root of	

Examples

1,254 £1,254 1.254 220kg 01-05-32 π $\sqrt{\quad}$
 \div \times $+$ $-$ $=$ $()$
 $\frac{1}{2}$ $\frac{7}{3}$ $\frac{3}{4}$ % metres, grams, \$
 $Y = C + I$ $3 + 9 - 2 = 10$ $D = f(P, Y)$

6.7: In my own words

Teacher's notes

Background

When using the work of other writers to support points in their own writing, students need to know how to present these citations, briefly acknowledging information which is factual or in the public domain, paraphrasing where they wish to stay close to the author's idea, summarizing wider points in a way that demonstrates real understanding, and synthesizing a group of relevant ideas from the sources to create their own points.

Aims

- to enable students to refer to the work of other writers appropriately
- to provide practice in paraphrasing and summarizing for particular purposes

Material

Texts which the students are reading and using as source material for their writing. For each text you should decide a purpose for using the ideas from the text. This may be a functional purpose, e.g., to provide a definition of a term, to explain the causes of a problem, to find evidence for a specific conclusion. Alternatively, it may be a content purpose, i.e., to find ideas or examples to answer an essay question you have specified for a writing task.

Procedure

- 1 Discuss with students the reasons for using the text(s), and help them to decide how useful and relevant each text is for their writing task, e.g., does the text simply provide a detailed and useful definition of a term or is it a key text with many ideas which can be used to support the answer to the question specified for their writing? Discuss how much of the text is relevant to their writing task, and decide whether the ideas could be paraphrased very briefly or should be summarized in more detail because they relate closely to the topic of the writing.
- 2 **Constructing an oral summary**
The students should be familiar with the text they want to summarize because they have already read it. Ask them to read through it again and then put it away so they cannot refer to it during the exercise. In pairs, students should each take a turn to answer the question What is this text about in (x) words? where the size of the number (x) increases with each repetition, e.g., five words, then ten words, fifteen words, twenty words, and finally thirty words. Each speaker must remember as much as they can of the text in order to reach the number of words specified in the question. For each repetition of this question, the speaker will build up the oral summary by adding more detail, and their partner can write down the answer. Students then decide what length of summary is appropriate for their purpose.
- 3 **Using key words to construct a summary**
This exercise is useful for synthesizing ideas from several texts. Ask students to select around five to ten key words from the texts that they think will be relevant and important for the summary they want to make. Students then put away the original texts, so they cannot look at these during the exercise, and, referring only to the key words, they construct an appropriate summary, e.g., to define a term or support a point in an argument. The purpose of the key words is to help them remember the ideas in the text. They are not required to use any of the key words, but may do so if appropriate.

4 Summarizing for a functional purpose

If the purpose of the summary is a functional one, ask students to make notes in a functional framework, e.g., a process flow diagram, a comparison and contrast table, a cause–effect chain or network, a classification diagram. The framework should only contain key words, and not phrases or whole sentences. If appropriate, students can add their own examples to the framework. They can then use this framework, rather than the original text, when summarizing the ideas.

5 Summarizing for a content purpose

If students are summarizing to support their ideas in the answer to an essay question, they can use a highlighter pen to select only parts of the text that are relevant to their purpose, and then use the strategies in stages 2 or 3 above to produce an appropriate summary. They can then look back to the original texts, and decide if any of the words or phrases are particularly appropriate to their purpose and could be quoted directly.

6 Working with poorly written summaries

Ask students to compare a text with a poorly written summary of this text, and discuss whether the summary is accurate in its reporting of the ideas of the original text or whether it captures the viewpoint of the original author. Students can identify aspects of the summary which do not reflect the original, and then attempt to write a better summary. This combines aspects of oral and written summarizing as students will have to give an oral summary of the original text in order to compare this to the poorly written summary.

7 Acknowledging sources

Each time students are asked to summarize a text or borrow ideas from it, they should also provide an in-text reference and a reporting verb, together with the full reference, which would appear at the end of the essay in the references list. This reinforces the need to acknowledge the source of citations, whether they are paraphrased or quoted directly, as well as the importance of using their own words.

8 Making summarizing strategies explicit

Once you have tried eliciting summaries from students using the ideas in 1–7 above, it is useful to discuss and evaluate these summarizing strategies. Students who are not confident in their use of language will usually report strategies which allow them to stay close to the source text. You can then ask them to contrast these strategies with those they use in their first language, in which they are experts. The photocopiable tasksheet shows an example of this contrast, and can be used as the basis for a discussion prompt for students to identify and evaluate the strategies that work best for them.

Follow-up

Each time students approach a text, they should answer a Big Picture question about the purpose of the text or its main point. This is good preparation for identifying the key ideas in the text which might be included in a summary. Students can negotiate different purposes for summarizing texts. If they are already studying on their degree programmes, they can bring texts to the EAP classroom which they need to use in their assignments, and experiment with some of the strategies listed above.

Tasksheet: In my own words

Read the strategies for summarizing listed below, and identify the strategies you use when you summarize texts in your own language and texts in English.

- 1 What beginner writers tend to do, which produces a **bad** summary:
 - a read the text to be summarized very slowly and in great detail, looking up the meaning of every word they do not know
 - b find the most general sentences in the paragraphs and highlight them or use them to make notes
 - c follow exactly the same structure as the original text while they
 - i join the general sentences together, paying no attention to the coherence of the summary or its purpose
 - ii change the order of words in the general sentences, thus destroying the cohesion of the summary
 - iii find synonyms for some of the words in the general sentences
 - d produce a summary that follows the original structure as closely as possible using many key words and phrases from the original
 - e claim in their writing that these are their own ideas by failing to acknowledge the source of their summary
- 2 What expert writers usually do, which produces a **good** summary:
 - a decide their goals in wanting to include the summary in their text
 - b consider the overall structure only if they want to summarize several texts of a similar structure together for comparison
 - c reduce the texts to a few lines in note form containing the key words
 - d construct an oral summary by asking the following questions:
 - i What is this about in 5 words?
 - ii What is this about in 15 words?
 - iii What is this about in 30 words?
 - iv What is this about in 50 words?
 - e write down this oral summary, changing it to an academic style
 - f look back to the original text if they need to quote particularly appropriate expressions from it
 - g ensure that the source of these quotations and the summary in general is attributed in their texts

Students summarize for their teacher because she or he tells them to. The main question they usually ask is 'How many words?'

Expert writers summarize because they need to incorporate the ideas of other people in their writing, to answer their own question, or support their own ideas. They want to keep their summaries as short as possible. The main question they ask is 'How much of this text is relevant to my main point?'

6.8: EAP warmers

Teacher's notes

Background

These suggested activities can be used as games or competitions at the beginning of a lesson or to give a break in the middle of a lesson. Teachers and students can develop similar games to recycle learning and to inject fun into the classroom.

Aims

- to develop fluency by regularly activating students' language resources
- to practise the language for specific rhetorical functions

Material

A means of recording students' responses for activities 3, 4 and 5

Office or household objects for activity 6

Teacher's visual of descriptions of simple objects

Procedure

1 Noun phrase awareness

Ask students to find the longest noun phrase in a text they are studying (phrases of 12 or 13 words are common in academic texts, and phrases of 30 words or more occur not infrequently in research articles). Once the noun phrase is found, they can try to unpack it and investigate its role in the text, and decide why the writer needed to use such a long phrase.

2 General noun awareness

Ask pairs of students to write a sentence on any topic, describing a situation. Each pair reads out the sentence, and other pairs have to think of the next sentence in a text dealing with that topic. The second sentence must begin with the words *This/These* + an appropriate general noun.

Example

First sentence: The computer in Room 104 is not working.

Continuation: *This problem* should be reported to the head of department.

Other suggestions could be *This equipment should be replaced* / *This item has been faulty for some time*.

3 Sentence auctions

This writing activity provides collaborative assessment in game form. Supply a very simple prompt, such as some simple data in a table, problem–solution–evaluation notes, or a simple causal chain in note form. Groups write sentences to represent each stage in the information.

The aim is then to construct a mini text with the teacher as scribe. The teacher asks one group to read out their first sentence. If another group think their sentence is better than one already offered, they read it out. The class can vote on which sentence is best, with the teacher as referee, and the team whose sentence is finally accepted to continue the text wins points. If they offer their sentence and it is rejected, points are deducted. The text is gradually built up using the best sentence to continue

it at each point. This provides on-going evaluation of the sentences and can lead to productive discussions on the choices available to writers when constructing a text.

4 **How many ways can you write this?**

Choose a sentence from a text the class is reading which expresses a functional relationship. Ask the students to form groups and write the same sentence in as many different ways as possible.

Example:

Increased carbon dioxide emissions have resulted in a rise in global temperatures.

Possibilities include:

Increased carbon dioxide emissions have caused a rise in global temperatures.

There has been a rise in global temperatures due to increased carbon dioxide emissions.

There have been increased carbon dioxide emissions resulting in a rise in global temperature.

Global temperatures have risen because of increased carbon dioxide emissions.

An increase in carbon dioxide emissions has led to a rise in global temperatures.

Increased carbon dioxide emissions are responsible for a rise in global temperatures.

Students can discuss to what extent the choice of which form to use would depend on the intended topic flow in the text, and which sentences are completely interchangeable.

5 **Functional stories**

To introduce a new rhetorical function, tell the class the beginning of a simple story or episode, preferably humorous, which involves this rhetorical function and ask the class to suggest how it might continue.

Examples:

The teacher explains that she borrowed a thousand pounds from her brother, but she gambled and lost it all at the casino. What would the students suggest she should do? The students suggest solutions which she notes down. They are encouraged to criticize each other's suggestion and the teacher records these and the final recommendation. The result is a mini-text with the structure problem–solution–evaluation–recommendation, which can be used to introduce the organization of a problem–solution text.

The function of evidence and conclusion texts could be introduced in a similar way, for example, by saying that a dead body was found by someone who was out walking. There was a large hammer nearby – what could be the conclusion? If the students suggest a murder, the teacher can introduce further evidence which the students have to evaluate (for example, the dead person had been a workman mending a fence).

A similar mini-text representing the evidence and conclusions drawn from it can be created.

As well as noticing the organization of the mini-texts, students can look for language that represents the functions used.

6 **Mystery objects**

This activity is a lively way to introduce the function of describing objects. Prepare a bag containing a variety of small devices and gadgets from the office or kitchen, e.g., a paperclip, a stapler, an egg-slicer, a rotary grater. Students form teams, and each team sends a member to the front of the class to examine one of the objects in the bag. They run back and describe the object to their team without using the name of the object. As soon as the team have correctly identified the object, they can send another runner to tell the teacher what the object is and then look at another object. The aim is to describe and guess as many objects as possible in a short time.

Once the game is over, ask the students to think about the way they described the object. Which was the quickest way to help the team guess the right answer? The answer is usually by a functional description, i.e., what the item is used for. Students identify other types of language they might need to describe the object, e.g., material, shape and mode of operation.

They read a simple text describing an everyday object, such as a paperclip, and identify the way it is organized, looking for sentences or sections which describe components, arrangement of parts, or uses of the object. They then highlight expressions which express these functions.

Examples of language exponents from the model descriptions of the paperclip and the button:

Class (general nouns):	<i>an item of stationery / a device / sheets of paper / a piece of metal wire / fabric</i>
Composition:	<i>consists of</i>
Function:	<i>for ___ ing</i>
Purpose	<i>to _____ / so that</i>
Dimensions:	<i>size / length / diameter</i>
Shape:	<i>adj. flat / oval / circular; n. disc / spiral / slot</i>
Arrangement and location:	<i>arranged in a square / at the centre of</i>
Collocations:	<i>holding / held together firmly</i>

Teacher's visual

Paperclip

This is an item of stationery for holding sheets of paper together. It can be any size from about one to five centimetres. It consists of a piece of metal wire bent into a flat, oval spiral. To use it, the sheets of paper are held together firmly and the paperclip is pushed over the edges of the paper so that these fit between two parts of the spiral.

Button

A button is a device for holding two pieces of fabric or leather together. It consists of a circular disc of a hard material such as wood, bone or, in more recent times, plastic. There are four holes arranged in a square at the centre of the disc. The button is stitched through the holes onto the fabric using fine thread. To use it, the two pieces of fabric are held together and the button on one piece of fabric is pushed sideways through a slot, whose length is the same as the diameter of the button, in the other piece of fabric.

6.9: Think like an algorithm! (Using grammar- and language-checking apps critically)

Teacher's notes

Background

Many students will be using electronic or online tools to check or improve their written assignments before handing them in, or even while they are writing. These include sophisticated language checkers, online thesauruses and predictive text apps, as well as the spelling and grammar check in Microsoft Word. In this exercise, students explore the issues and problems that arise when they try to use these writing aids, and develop an understanding of the limitations and pitfalls of electronic tools in assisting their writing process. This is likely to be a challenging task which will stretch the students' (and the teacher's) critical thinking abilities. However, the example below from the text about cancer treatment shows how potentially serious problems might be generated by the uncritical use of such easily available apps.

Aims

- to understand the way grammar and language checking apps operate and why they are liable to give false results
- to use critical thinking to develop strategies for cross-checking the corrections and suggestions provided and deciding whether to accept or reject them

Material

Individual copies of the tasksheet and the key, suggesting reasons.

Procedure

- 1 Ask students which online or other apps they use to check their work or help them in the writing process and make a list of what they are using. Ask for their views of how reliable or useful they have found the ones they have tried. Ask how they think these types of apps work. Who designs them? How are they constructed? How are they tested for accuracy? Students with IT skills may be able to give some answers to these questions. The main purpose of this discussion is to highlight that these apps work through algorithms. These may be very sophisticated, but, basically, they are a pre-determined set of procedures.
- 2 Give out the student tasksheet. In groups, students read the examples, identify the errors made by the app and try to work out why the app made this inaccurate correction or suggestions, or failed to correct the error.
- 3 Give out the key, which suggests some reasons why the tools made these false corrections or failed to register actual language errors and encourage students to discuss and question the findings. The main aim is for students to be clearly aware of the strengths and weaknesses of both machine-generated correction and human corrections and not to blindly accept the output of machine checking and suggestions. It might be worth pointing out that the tentative suggestions made by the Microsoft Word spelling and grammar checker are safer, as these merely suggest there might be a problem, rather than actually changing the text. They leave more autonomy for the writer to decide if these are really errors.

Follow-up

For some of their subsequent writing assignments, after handing them in, students can run the original through a correction or checking app and print this out. The teacher corrects the assignment in the usual way and when the assignments are returned to the students, they compare the teacher's corrections and language points with those provided by the tool and discuss any differences.

KEY

Suggested answers

- 1 Using carbon nanotubes for *in vivo* toxicity studies, particularly on aquatic organisms, are controversial, because of the inconsistency of results.

Suggested explanation: This should be *is controversial*. It is not the carbon nanotubes that are controversial, but using them in certain types of studies. The checker has not picked up the fact that the subject of *are* is *Using* (which is the controlling noun of the long noun phrase at the beginning). The algorithm only picked up the nearby plural nouns (*studies/organisms*) and it is programmed to make the verb agree with one of the nearest nouns. This is an example of how such tools are limited in coping with the complex noun phrases in academic texts.

- 2 Exploiting these new energy sources requires more fundamental scientific research to increase the current understanding of flow behaviour and well performance in unconventional oil reservoirs.

Suggested explanation: The algorithm recognizes *well* as the common adverb (e.g., *The athlete performed well in the race.*) and suggests replacing it with the adjective *good*, as it is before a noun, (*performance*). Of course, the writer is talking about an oil well! This is an example of how the algorithm does not know anything about the context or what the writer wants to say. It is a common error when using the Microsoft Word checker that technical words are not recognized, or are confused with everyday meanings of the same word.

- 3 It has been **mutual** practice to divide research methods into two types of research strategy: quantitative and qualitative research. Research methodology is the structure of **obvious** rules and processes on which research is based and against which claims for knowledge are appraised.

Suggested explanations: Here, the thesaurus has changed the frequent collocation *common practice* (meaning something that is usually done) to a phrase with a completely different meaning. *Mutual* means shared between two particular people or organizations. This change will confuse the readers, who will stop and try to work out what *mutual practice* involves and which two people or organizations are involved. Similarly, it has changed the writer's original expression *clear rules* (ones that are clearly laid out and specific) to *obvious rules and processes*, which implies we should be able to work them out for ourselves without being told.

- 4 The brain is a complex **piano** connected to the **neurotic** system.

Suggested explanations: Here, the thesaurus has given crazy suggestions that have completely destroyed the writer's intended meaning. In a thesaurus, words connected in meaning with the original word are listed, but they may be only connected in a very specific context. Here, the student originally used *complex organ*, meaning an organ in the human body, but the thesaurus has suggested *piano* because this is related to the organ (another type of musical instrument). Similarly, it has suggested *neurotic* system instead of the student's original, correct, expression *nervous* system. In everyday informal English, people sometimes say someone is *neurotic*, meaning they are too *nervous* (in the sense of timid and anxious). However, in biology, *nervous* means related to the nerves and the nervous system is, of course in the family of human biology NP collocations that include: the *circulatory system*, *lymphatic system*. This is an example of how using a thesaurus can destroy the writer's original intended meaning, as it does not give any information about possible technical meanings and the contexts in which they are used. Most technical terms are very specific and should not be altered when paraphrasing, nor to avoid repetition.

Student's original text:

- 5 Radiotherapy is the art of using ionising radiation to destroy **malignant** tumours while minimising damage to healthy tissue. This treatment plays an **important** role in the treatment of cancer. It represents the main curative option in advanced tumours.

Text changed by language-checking tool:

- 6 Radiotherapy is the art of using ionising radiation to destroy **tumours** while minimising damage to healthy tissue. This treatment plays an **essential** role in the treatment of cancer. It represents the main curative option in advanced tumours.

Suggested explanations: Examples 5 and 6 show how very serious the errors caused by these algorithms can be. The tool does not accept *malignant* and simply deletes it. This may be because such algorithms are sometimes trained on sets of school essays, for example. In this case, the content is rarely important and the essays are marked on how well the ideas are expressed and the suitability of language. Thus, the algorithm might only see the everyday meaning of *malignant* (evil in intention), which would be considered too dramatic, and therefore not academic, in a simple school essay. However, it would be terrible in a medical diagnosis if the word *malignant* was deleted from a doctor's diagnostic report and could cost the patient's life. The problem is that the algorithm knows a lot about the language, but nothing at all about cancer. Similarly, the inserted word, *essential*, means there is no other possible method, but, of course, there are other types of treatment, but this is an important one. So, the student was right and the algorithm was wrong. These types of apps that claim to produce perfect writing should be used with great caution and it may be that they are not really suitable for checking academic writing, but only for school essays and formal letters.

Tasksheet: How to think like an algorithm!

The examples below are from cases where real students have used various electronic tools to help them write or check their work, but the tools have failed to identify errors or made false corrections that interfere with the writer's intended meaning. Discuss these in your groups. Try to 'think like an algorithm' and work out how the way these tools were designed might have led them to these false conclusions.

The two examples below were run through the Microsoft Word spelling and grammar checker. Example 1 has an error which was not picked up. Can you spot the error? Can you give a possible reason why the algorithm did not recognize it?

In example 2, the word *well* is picked up as an error and a suggestion is made to replace it with *good*, which is incorrect in this context. Can you explain why the algorithm thought *well* was incorrect?

- 1 Using carbon nanotubes for *in vivo* toxicity studies, particularly on aquatic organisms, are controversial, because of the inconsistency of results.
- 2 Exploiting these new energy sources requires more fundamental scientific research to increase the current understanding of flow behaviour and well performance in unconventional oil reservoirs.

In examples 3 and 4, the students used an online thesaurus to try to paraphrase the words of their original sources, or to try to avoid repeating words or phrases too many times, or just because they thought it would make their writing sound more interesting and impress the reader. This resulted in substituting words that are misleading or ridiculous (shown in bold). Can you work out what the student's original words were and why the thesaurus suggested these inappropriate words?

- 3 It has been **mutual** practice to divide research methods into two types of research strategy: quantitative and qualitative research. Research methodology is the structure of **obvious** rules and processes on which research is based and against which claims for knowledge are appraised.
- 4 The brain is a complex **piano** connected to the **neurotic** system.

Examples 5 and 6 show part of a student's research paper before and after alterations made by an online grammar and writing checking platform. Identify and underline the changes and discuss why they might be problematic in a text about such a serious subject, which may be published in a medical journal. Try to think of why the design of the algorithm used might have led to making these changes.

Student's original text:

- 5 Radiotherapy is the art of using ionising radiation to destroy malignant tumours while minimising damage to healthy tissue. This treatment plays an important role in the treatment of cancer. It represents the main curative option in advanced tumours.

Text changed by language-checking tool:

- 6 Radiotherapy is the art of using ionising radiation to destroy tumours while minimising damage to healthy tissue. This treatment plays an essential role in the treatment of cancer. It represents the main curative option in advanced tumours.