

ANSWER KEY INCLUDED



Fourth Edition

Academic Writing

A Handbook for
International Students



Stephen Bailey



Academic Writing

Most international students need to write essays and reports for exams and coursework, but writing good academic English is one of the most demanding tasks students face. This new, fourth edition of *Academic Writing: A Handbook for International Students* has been completely revised to help students reach this goal.

The four main parts of *Academic Writing* are:

- The Writing Process
- Elements of Writing
- Vocabulary for Writing
- Writing Models

Each part is divided into short units that contain examples, explanations and exercises, for use in the classroom or for self-study. The units are clearly organised to allow teachers and students to find the help they need with writing tasks, while cross-referencing allows easy access to relevant sections.

In the first part, each stage of the writing process is demonstrated and practised, from selecting suitable sources, reading, note-making and planning through to rewriting and proofreading.

The fourth edition of this popular book builds on the success of the earlier editions, and has a special focus on the vital topic of academic vocabulary in Part 3, 'Vocabulary for Writing'. Part 3 deals with areas such as nouns and adjectives, adverbs and verbs, synonyms, prefixes and prepositions, in an academic context. More key features of the book include:

- All elements of writing are clearly explained, with a full glossary for reference
- Models provided for all types of academic texts: essays, reports, reviews and case studies
- Full range of practice exercises, with answer key included
- Use of authentic academic texts
- A companion website offers further practice with a range of additional exercises
- Fully updated, with sections on finding electronic sources and evaluating Internet material

All international students wanting to maximise their academic potential will find this practical and easy-to-use book an invaluable guide to writing in English for their degree courses.

Stephen Bailey is a freelance writer of materials for English for Academic Purposes. He has taught students in Barcelona, Tokyo, Johor Bahru and Prague, and more recently at Derby University and the University of Nottingham. His other books include *Academic Writing for International Students of Business* (Routledge).

International students have many adjustments to make as they enter British universities and Stephen's book makes at least one area of their lives – academic study – much more approachable. With its straightforward approach and improved layout, it will be a book many students will come to regard as an essential companion to their university lives.

Stephen Dewhirst, *Freelance EAP teacher, UK*

International students and indeed all students should find this book very helpful. It is accessible to read and engages in an explicit and sharply focused manner with many elements of the critical use of reading, of writing and of studying. The book usefully explains, exemplifies, and tests understanding. It deals with the problematic areas of plagiarism and grammatical work, of developing argument and counter argument, and essay expression. It should be very useful for international students engaged in academic writing.

Professor Gina Wisker, *University of Brighton, UK*

Stephen Bailey's Academic Writing is one of the few academic writing books that deal with core areas effectively - language, text type, academic conventions and the writing process. This is done by giving simple explanations, authentic examples and useful practice opportunities which can either be done in class or as self study. The book appeals to a range of levels including pre and in sessional students and equips them with a range of the key language and skills needed to embark on academic writing in higher education.

Fiona Gilbert, *Oxford Brookes University, UK*

This book provides international students with a useful introduction to the basic practices in reading and writing for academic purposes. It includes topics such as the typical content of article abstracts, the mechanics of citation and referencing, and some uses of sources in writing – topics that will help international students, studying in an English medium university for the first time, to meet their tutors' expectations in reading and writing assignments. The chapter on reading advises a critical attitude to internet resources, advice most relevant to students today.

Antonia Chandrasegaran, *National Institute of Education, Singapore*

Academic Writing

A Handbook for International Students

Fourth edition

Stephen Bailey

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My wife Rene has provided me with invaluable support, encouragement and advice on many aspects of academic writing during the development of this book. Final thanks are due to my daughter, Sophie, for helping me to keep the whole subject in perspective!

Introduction for Teachers

Aims

This course has been developed to help international students with their written assignments in English at both undergraduate and postgraduate level. Students who are not native speakers of English often find the written requirements of their courses very challenging. In addition to the vocabulary of academic English, they have to learn new conventions of style, referencing and format. Furthermore, their lecturers are often concerned by their lack of critical thinking skills, and also mention students' failure to answer the specific question and their inability to develop answers logically. Issues around vocabulary, plagiarism and referencing skills are significant additional worries.

The fourth edition of *Academic Writing: A Handbook for International Students* sets out to address these problems directly. It recognises that while international students are not expected to write perfect English, accurate and effective language use is an essential skill for such students. What may be individually minor problems with prepositions, word endings, spelling or articles can result in essays that are barely comprehensible to the best-motivated marker.

Structure

To deal with this, students are guided through the stages of the writing process in [Part 1](#) and then the related writing skills are explained and practised in [Part 2](#). [Part 3](#) is designed to assist students with aspects of academic vocabulary, understandably a prime concern for many non-native users of English. [Part 4](#) provides models of some common writing formats, such as case studies.

Teachers may wish to work through the writing process in [Part 1](#) while referring to units in [Part 2](#) as the group progresses. ([Part 2](#) is not intended to be taught from start to finish: note the alphabetical organisation of [Parts 2, 3 and 4](#).)

<i>Part</i>	<i>Topic</i>	<i>Main application</i>
1	The Writing Process from finding sources to proofreading	Classroom use
2	Elements of Writing from argument to visual information	Classroom use and self-study
3	Vocabulary for Writing from abbreviations to synonyms	Classroom use, self-study and reference
4	Writing Models from case studies to surveys	Self-study and reference

Using the Book

A feature of *Academic Writing* is its clear and logical organisation, which makes it ideal as a self-study and reference guide for students needing to work independently. This is a recognition that most courses in academic writing are inevitably time-constrained, and that some students may have no other option. It is designed to be used on both pre-sessional and in-sessional courses, and is suitable for subject-specific (e.g. law, medicine) and multi-discipline courses in English for Academic Purposes (EAP). The first three units in [Part 1](#) assume a fairly low level of writing ability and deal with some basic issues, but beyond this the material becomes more demanding.

Academic Writing uses authentic texts and examples taken from a wide range of disciplines. Extensive cross-referencing is provided to assist both teachers and students find relevant support. All exercises can be done individually or in pairs and groups. A full answer key, plus glossary and index, are included at the end of the book. Extra practice exercises are available on the book's website: www.routledge.com/cw/bailey/.

The material in this course has been extensively tested in the classroom, but improvements can always be achieved. Therefore, I would be very glad to receive any comments or suggestions about the book from teachers, for future editions.

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Introduction for Students

Why is writing English more difficult than speaking?

Many international students who arrive at college to study in English can speak the language well enough for normal life: shopping, travelling and meeting people. But the same students are often surprised to find that writing essays and reports in English is much more difficult. It can be helpful to think about the reasons for this situation.

First, speaking is usually done face to face. If your listener cannot understand you, then they can look puzzled and ask you to repeat. But this does not work with a reader! When we write, we usually have little idea who may read our work, so we have to write as clearly as possible so that it is easy to understand.

With academic writing, writers and readers have to learn special conventions, such as using capital letters in certain places. If you do not follow these conventions, your meaning may be unclear and your teacher can have difficulty assessing your work.

Another issue is vocabulary. Most academic subjects require writers to use semi-formal language, which is different from the idiomatic language used in speech. One example is using a verb such as 'continue' instead of phrasal verbs such as 'go on'.

What is the purpose of the book?

This book is designed to help you succeed in the writing tasks you may be given as part of your academic course. The kind of writing that you are asked to do may be different from the work you have done before, and for some this may be the first time you have had to write long essays or reports in English.

Your teachers know that English is not your native language and will be sympathetic to the problems you have in your writing. But at the same time, you will want to learn to write as clearly and accurately as possible, not only to succeed on your current course, but also in preparation for your career. Almost all large companies and organisations expect their staff to be able to communicate effectively in written English, as well as orally. Therefore, during your

studies you have the ideal opportunity to learn to write English well, and this book can help you achieve that goal.

In addition to accuracy, students on academic courses are expected to take a critical approach to their sources. This means that your teachers will expect you to question and evaluate everything you read, asking whether it is reliable or relevant. You are also expected to refer carefully to the sources of all your ideas, using a standard system of referencing. *Academic Writing: A Handbook for International Students* will help you to develop these skills.

How is the book organised?

The book can be used either with a teacher or for self-study and reference. Each unit contains practice exercises that can be checked using the answer key at the end of the book. For ease of use, it is divided into the following sections:

To help you get the most out of this course, note the following points:

- Instructions are printed as shown here:
 - **List your ideas below.**
- Links to relevant units are shown like this:

► See **Unit 2.13** Style

These links help you to find extra information, but do not have to be read in order to complete the exercises.

- Extra practice in some areas is provided on the *Academic Writing* website www.routledge.com/cw/bailey/. This is shown, for example, by:



Referencing

- Answers are provided for most exercises in the answer key at the end of the book. If no definite answer can be given, an example answer is usually offered.
- The **index** can be used to locate specific information. The **glossary** explains academic terms that you may not be familiar with.

Thousands of students have already found that *Academic Writing* helps them to write more clearly and effectively. This new edition has been developed using their feedback and ideas, and I would be very glad to receive comments and suggestions on any aspect of the book to help develop future editions.

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Academic Writing Quiz

■ How much do you know about academic writing? Find out by doing this fun quiz.

- 1 The main difference between academic writing and normal writing is that academic writing:
 - (a) uses longer words
 - (b) tries to be precise and unbiased
 - (c) is harder to understand
- 2 The difference between a project and an essay is:
 - (a) essays are longer
 - (b) projects are longer
 - (c) students choose projects' topics
- 3 Teachers complain most about students:
 - (a) not answering the question given
 - (b) not writing enough
 - (c) not referencing properly
- 4 The best time to write an introduction is often:
 - (a) first
 - (b) last
 - (c) after writing the main body
- 5 Plagiarism is:
 - (a) a dangerous disease
 - (b) an academic offence
 - (c) an academic website
- 6 Making careful notes is essential for:
 - (a) writing essays
 - (b) revising for exams
 - (c) all academic work

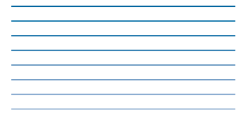
- 7 An in-text citation looks like:
 - (a) (Manton, 2008)
 - (b) (Richard Manton, 2008)
 - (c) (Manton, R. 2008)
- 8 Paraphrasing a text means:
 - (a) making it shorter
 - (b) changing a lot of the vocabulary
 - (c) adding more detail
- 9 Paragraphs always contain:
 - (a) six or more sentences
 - (b) an example
 - (c) a topic sentence
- 10 The purpose of an introduction is:
 - (a) to give your aims and methods
 - (b) to excite the reader
 - (c) to summarise your ideas
- 11 Proofreading means:
 - (a) getting a friend to check your work
 - (b) checking for minor errors
 - (c) rewriting
- 12 Teachers expect students to adopt a critical approach to their sources:
 - (a) sometimes
 - (b) only for Master's work
 - (c) always

(Answers on page 242)

The Writing Process

PART

1



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UNIT
1.1

Background to Writing

Most academic courses test students through written assignments. These tasks include coursework, which may take weeks to write, and exam answers, which often have to be written in an hour. This unit deals with:

- the names of different writing tasks
- the format of long and short writing tasks
- the structure of sentences and paragraphs

1 The purpose of academic writing

Writers should be clear why they are writing. The most common reasons for writing include:

- to report on a piece of research the writer has conducted
- to answer a question the writer has been given or chosen
- to discuss a subject of common interest and give the writer's view
- to synthesise research done by others on a topic

■ Can you suggest any other reasons?

- _____
- _____

Whatever the purpose, it is useful to think about the probable readers of your work. How can you explain your ideas to them effectively? Although there is no fixed standard of academic writing, it is clearly different from the written style of newspapers or novels. For example, it is generally agreed that academic writing attempts to be accurate and objective. What are its other features?

■ Working alone or in a group, list your ideas below.

- *Impersonal style - avoids using 'I' or 'we'*
- _____
- _____
- _____

2 Common types of academic writing

Below are the most normal types of written work produced by students.

■ Match the terms on the left to the definitions on the right.

Notes	A piece of research, either individual or group work, with the topic chosen by the student(s).
Report	The longest piece of writing normally done by a student (20,000+ words), often for a higher degree, on a topic chosen by the student.
Project	A written record of the main points of a text or lecture, for a student's personal use.
Essay	A general term for any academic essay, report, presentation or article.
Dissertation/ Thesis	A description of something a student has done.
Paper	The most common type of written work, with the title given by the teacher, normally 1,000–5,000 words.

3 The format of long and short writing tasks

Short essays (including exam answers) generally have this pattern:

Introduction
Main body
Conclusion

Longer essays and reports may include:

Introduction
Main body

- Literature review
- Case study
- Discussion
- Conclusion
- References
- Appendices

► See [Unit 4.3](#) Longer Essays

Dissertations and journal articles may have:

- Abstract
- List of contents
- List of tables
- Introduction
- Main body
 - Literature review
 - Case study
 - Findings
 - Discussion
- Conclusion
- Acknowledgements
- References
- Appendices

■ Find the words in the lists above that match the following definitions:

(a) A short summary that explains the paper's purpose and main findings.

(b) A list of all the sources the writer has mentioned in the text.

(c) A section, at the end, where additional information is included.

(d) A short section where people who have helped the writer are thanked.

(e) Part of the main body in which the views of other writers on the topic are discussed.

(f) A section where one particular example is described in detail.

4 The features of academic writing

There are no fixed rules for the layout of academic work. Different schools and departments require students to follow different formats for written work. Your teachers may give you guidelines, or you should ask them what they want, but some general features apply to most formats.

■ Read the text below and identify the features underlined, using the words in the box.

sentence	heading	sub-title	paragraph	title	phrase
----------	---------	-----------	-----------	-------	--------

- (a) **A fishy story.**
- (b) Misleading health claims regarding omega-3 fatty acids.
- (c) Introduction.
- (d) There has been considerable discussion recently about the benefits of omega-3 fatty acids in the diet. (e) It is claimed that these reduce the risk of cardiovascular disease and may even combat obesity. Consequently, food producers have added omega-3s to products ranging from margarine to soft drinks in an attempt to make their products appear healthier and hence increase sales.
- (f) However, consumers may be unaware that there are two types of omega-3s. The best (long-chain fatty acids) are derived from fish, but others (short-chain fatty acids) come from cheaper sources such as soya. This latter group have not been shown to produce the health benefits linked to the long-chain variety. According to Tamura *et al.* (2009), positive results may only be obtained either by eating oily fish three times a week, or by taking daily supplements containing 500 mg of eicosapentaenoic acid (EPA) or docosahexaenoic acid (DHA).

(a) Title (b) _____ (c) _____ (d) _____ (e) _____ (f) _____

5 Some other common text features

- (a) **Reference** to sources using **citation**: *According to Tamura et al. (2009)*
- (b) The use of **abbreviations** to save space: *docosahexaenoic acid (DHA)*
- (c) **Italics**: used to show words from other languages: *Tamura et al.* (= and others)
- (d) **Brackets**: used to give extra information or to clarify a point: *... but others (short-chain fatty acids) come from cheaper sources such as soya.*

6 Simple and longer sentences

- Study the table below.

Dragon Motors – vehicle production 2009–2013

2009	2010	2011	2012	2013
135,470	156,935	164,820	159,550	123,075

All sentences contain verbs:

In 2009, the company **produced** over 135,000 vehicles.

Between 2009 and 2010, vehicle production **increased** by 20 per cent.

Simple sentences (above) are easier to write and read, but longer sentences are also needed in academic writing. However, students should make clarity a priority, and avoid writing very lengthy sentences with several clauses until they feel confident in their ability.

Sentences containing two or more clauses use **conjunctions**, **relative pronouns** or **punctuation** to link the clauses:

In 2009, Dragon Motors produced over 135,000 vehicles, **but** the following year production increased by 20 per cent. (conjunction)

In 2011, the company built 164,820 vehicles, **which** was the peak of production. (relative pronoun)

Nearly 160,000 vehicles were produced in 2012; by 2013, this had fallen to 123,000. (punctuation)

- Write two simple and two longer sentences using data from the table above.

(a) _____

(b) _____

(c) _____

(d) _____

- See [Unit 2.13.5](#) Style: Varying sentence length

7 Writing in paragraphs

■ Discuss the following questions:

- What is a paragraph?
- Why are texts divided into paragraphs?
- How long are paragraphs?
- Do paragraphs have a standard structure?

■ Read the text below and divide it into a suitable number of paragraphs.

BIOCHAR

Charcoal is produced by burning wood slowly in a low-oxygen environment. This material, which is mainly carbon, was used for many years to heat iron ore to extract the metal. But when Abraham Darby discovered a smelting process using coke (produced from coal) in 1709 demand for charcoal collapsed. At approximately the same time the carbon dioxide level in the atmosphere began to rise. But a new use for charcoal, re-named biochar, has recently emerged. It is claimed that using biochar made from various types of plants can both improve soil quality and combat global warming. Various experiments in the United States have shown that adding burnt crop wastes to soil increases fertility and cuts the loss of vital nutrients such as nitrates. The other benefit of biochar is its ability to lock CO₂ into the soil. The process of decay normally allows the carbon dioxide in plants to return to the atmosphere rapidly, but when transformed into charcoal this may be delayed for hundreds of years. In addition, soil containing biochar appears to release less methane, a gas which contributes significantly to global warming. American researchers claim that widespread use of biochar could reduce global CO₂ emissions by over 10 per cent. But other agricultural scientists are concerned about the environmental effects of growing crops especially for burning, and about the displacement of food crops that might be caused. However, the potential twin benefits of greater farm yields and reduced greenhouse gases mean that further research in this area is urgently needed.

► See **Unit 1.10** Organising Paragraphs

UNIT 1.2

Reading

Finding Suitable Sources

Students often underestimate the importance of effective reading, but on any course it is vital to be able to find and understand the most relevant and suitable sources quickly. This unit:

- examines the most appropriate text types for academic work
- explores ways of locating relevant material in the library
- explains the use of electronic resources

1 Academic texts

You may need to read a variety of types of texts, such as websites or journal articles, for your course. So it is important to identify the most suitable texts and recognise their features, which will help you to assess their value.

- You are studying Tourism Marketing. Read the text extracts 1–4 below and decide which are the most suitable for academic use, and why.

Text	Suitability?
1	<i>Yes, it summarises some relevant research, and includes citations.</i>
2	
3	
4	

1

To promote tourism and market destination, it is important to study the tourists' attitude, behaviour and demand. The studies of Levitt (1986) and Kotler and Armstrong (1994) suggest that an understanding of consumer behaviour may help with the marketing planning process in tourism marketing. The research of consumer behaviour is the key to the underpinning of all marketing activity which is carried out to develop, promote and sell tourism products (Swarbrooke and Horner, 1999; Asad, 2005). Therefore, the study of consumer behaviour has become necessary for the sake of tourism marketing.

2

The romance of travel has always fascinated me, and our recent trip to Thailand lived up to expectations. We flew from Dubai and after a comfortable flight arrived in Bangkok just as the sun was rising. Our stay in the city lasted only a couple of days before we set off for the hill country around Chang Mai, where we were planning to visit some of the indigenous tribes who live in this mountainous region. When we arrived, the weather was rather disappointing, but after a day the heavy rain gave way to sparkling clear sunshine.

3

Holiday trips to the Antarctica have quadrupled in the past decade and last year more than 46,000 people visited the land mass and surrounding oceans. However, safety fears and concerns about the impact visitors are having on the delicate frozen landscape have soared and members of the Antarctic Treaty – an agreement between 28 nations, including the UK, on the use of the continent – are now meeting to discuss ways to regulate tourism.

British officials are seeking to establish a 'strategic agreement for tourism' around the South Pole. If successful, it will see treaty members introduce new measures to improve the safety of tourist trips, while also reducing the impact that visitors will have on the environment. The regulations could see limits on the number of ships and landings, restrictions on how close they come to shore, a ban on building tourist facilities and hotels on the continent, and rules on waste discharges from ships.

4

Equally, from a political perspective, the nature of state involvement in and policies for tourism is dependent on both the political-economic structures and the prevailing political ideology in the destination state, with comparisons typically made between market-led and centrally planned economies. For example, the Thatcher–Reagan-inspired neo-liberalism of the 1980s, and the subsequent focus on privatisation and the markets in many Western nations contrasted starkly with the then centrally planned tourism sectors in the former Eastern Europe (Buckley and Witt, 1990; Hall, 1991). At the same time, of course, it has also long been recognised that the political-economic relationship of one nation with another or with the wider international community (that is, the extent of political-economic dependency) may represent a significant influence on tourism development (Telfer, 2002). Thus, in short, tourism planning and development in the destination tends to reflect both the structures and political ideologies of the state and its international political-economic relations.

- The main features of academic texts are listed in the table below. Find examples of each using the texts above.

Feature	Examples
1 Formal vocabulary	<i>the marketing planning process in tourism marketing ... the extent of political-economic dependency ...</i>
2 Use of references	
3 Impersonal style	
4 Long, complex sentences	

2 Types of text

- The table below lists the most common written sources used by students. Work with a partner to consider their likely advantages and disadvantages.

Text type	Advantages	Disadvantages
Textbook	<i>Written for students</i>	<i>May be too general</i>
Website		
Journal article		
Official report (e.g. from government)		
Newspaper or magazine article		
e-Book		

3 Using reading lists

Your teacher may give you a printed reading list, or it may be available online through the library website. The list will usually include textbooks, journal articles and websites. If the list is electronic, there will be links to the library catalogue to let you check on the availability of the material. If the list is printed, you will have to use the library catalogue to find the texts. You do not have to read every word of a book because it is on the list. Your teacher will probably suggest which pages to read, and also tell you which parts are the most important. On reading lists, you will find the following formats:

Books	Miles T. R. <i>Dyslexia: a hundred years on</i> /T. R. Miles and Elaine Miles, 2nd ed. Open University Press, 1999.
Journal articles	Paulesu E. <i>et al.</i> Dyslexia: cultural diversity and biological unity. <i>Science</i> , 2001, 291, pages 2165–2167.
Websites	www.well.ox.ac.uk/monaco/dyslexia.shtml

4 Using library catalogues

University and college libraries usually have online catalogues. These allow students to search for the materials they want in various ways. If you know the title and author's name, it is easy to check if the book is available, but if you are making a search for material on a specific topic, you may have to vary the search terms. For instance, if you have been given an essay title:

'Is there a practical limit on the height of tall buildings? Illustrate your answer with reference to some recent skyscrapers.'

you might try:

- skyscraper design
- skyscraper construction
- design of tall building
- construction of tall buildings

If you use a very specific phrase, you will probably only find a few titles. 'Skyscraper construction', for example, only produced three items in one library catalogue, but a more general term such as 'skyscrapers' found 57.

- You have entered the term 'skyscrapers' in the library catalogue, and these are the first 10 results. In order to answer the essay title above, which would you select to borrow? Give your reasons.

Full details	Title	Year	Location	Holdings
1	Skyscrapers: a history of the world's most extraordinary buildings/by Judith Dupré; introductory interview with Adrian Smith	2013	Main library	Availability
2	Manhattan skyscrapers/Eric P. Nash; photographs by Norman McGrath. 3rd ed.	2010	Main library	Availability
3	Art deco San Francisco [electronic resource]: the architecture of Timothy Pflueger/Therese Poletti; photography by Tom Paiva	2008	Fine Arts library	Availability
4	Skyscraper for the XXI century/edited by Carlo Aiello	2008	Science library	Availability
5	Taipei 101/Georges Binder [editor]	2008	Main library	Availability
6	Tall buildings: image of the skyscraper/Scott Johnson	2008	Fine Arts library	Availability
7	Skyscrapers: fabulous buildings that reach for the sky/Herbert Wright	2008	Main library	Availability

Full details	Title	Year	Location	Holdings
8	Eco skyscrapers/Ken Yeang. 3rd ed.	2007	Science library	Availability
9	Cost optimization of structures: fuzzy logic, genetic algorithms, and parallel computing/Hojjat Adeli, Kamal C. Sarma	2006	Science library	Availability
10	Skyscrapers: a social history of the very tall building in America/by George H. Douglas	2004	Main library	Availability

Full details

If you click on this, you will get more information about the book, including the number of pages and a summary of the contents. If a book has had more than one edition, it suggests that it is a successful title. This may help you decide whether to borrow it.

Year

The books are listed by the most recent first; always try to use the most up-to-date sources.

Location

Many large universities have more than one library. This tells you which one the book is kept in.

Holdings

If you click on availability, it will tell you how many copies the library holds and if they are available to borrow or out on loan.

5 Using library websites to search electronic resources

Journals are specialised academic publications produced on a regular basis, containing recent research. You need to be familiar with the main journals in your subject area. They are usually available in paper or electronic formats (e-journals).

E-journals and other electronic resources such as subject databases are becoming increasingly important. Their advantage is that they can be accessed by computer, saving the need to visit the library to find a book. Most library websites have a separate portal or gateway for searching electronic resources.

These are the results found in one database for journal articles on ‘skyscrapers’:

- 1 Skyscrapers
Cesar Pelli
Perspecta, Vol. 18, (1982), pp. 134–151
- 2 Skyscrapers
Robert Phillips
The Hudson Review, Vol. 60, No. 2 (Summer, 2007), p. 276

- 3 Three New Skyscrapers
MoMA, No. 25 (Winter, 1983), p. 4
- 4 Stars for Skyscrapers
Lee Richard Hayman
The Phylon Quarterly, Vol. 19, No. 3 (3rd Qtr., 1958), p. 276
- 5 Dawn Rises over Skyscrapers
Deane Fisher
Phylon (1960–), Vol. 28, No. 2 (2nd Qtr., 1967), p. 138
- 6 Mario Palanti and the Palacio Salvo: The Art of Constructing Skyscrapers
Virginia Bonicatto, Chris Miller
Getty Research Journal, No. 5 (2013), pp. 183–188

Note that many of these articles will be out of date or irrelevant, but these search engines allow you to access a great variety of material quickly. It is usually sufficient to read the abstract to find out if the article will be relevant to your work. Note that most journal websites contain a search engine to allow you to search all back issues by subject. They may also offer links to articles in other journals on the same topic.

The best way to become familiar with these methods is to practise. Library websites usually contain tutorials for new students, and librarians are always willing to give help and advice when needed.

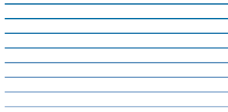
■ **Select a specific topic from your subject area.**

- (a) Use the library catalogue to search for relevant books. Write down the most useful titles.
- (b) Look for a few relevant journal articles, using the library portal. Write a reference for each article.

UNIT
1.3

Reading

Developing Critical Approaches



Students are expected to take a critical approach to sources, and this requires a good understanding of written texts. This unit:

- explains effective reading methods
- examines common text features, including abstracts
- explores and practises a critical analysis of texts

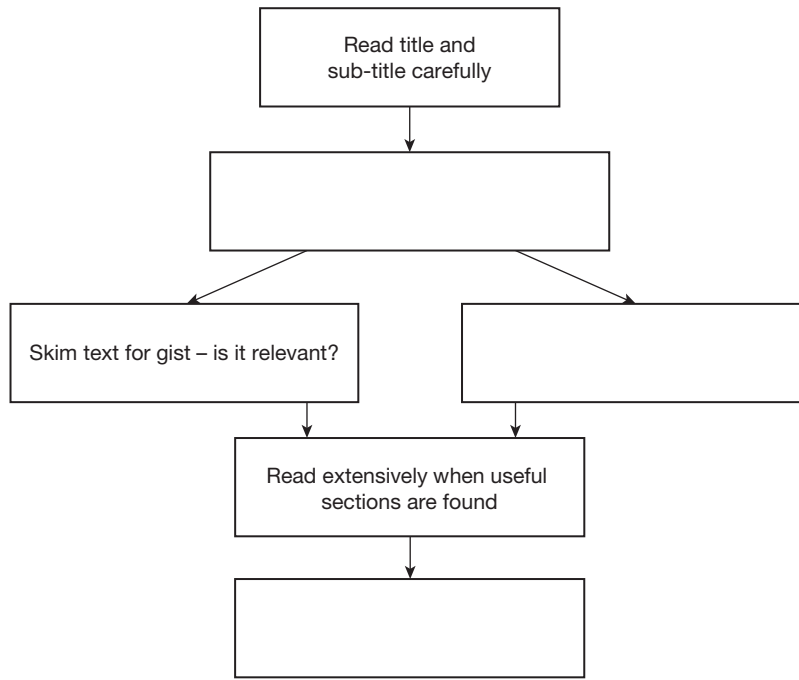
1 Reading methods

It is easy for students to underestimate the importance of reading skills. But, especially for international students, reading academic texts in the quantity required for most courses is a demanding task. Yet students will not benefit from attending lectures and seminars unless the preparatory reading is done promptly, while most writing tasks require extensive reading. Moreover, academic texts often contain new vocabulary and phrases, and may be written in a rather formal style. This means that special methods have to be learnt to cope with the volume of reading required, which is especially important when you are reading in another language. Clearly, you do not have time to read every word published on the topic you are studying, so you must first choose carefully what you read and then assess it thoroughly. The chart opposite illustrates the best approach to choosing suitable texts.

■ Complete the empty boxes in the chart with the following techniques:

- Read intensively to make notes on key points
- Scan text for information you need (e.g. names)
- Survey text features (e.g. abstract, contents, index)

Choosing suitable texts



■ Can you suggest any other reading skills to add to the chart above?

- _____
- _____

2 Titles, sub-titles and text features

Many books and articles have both a title and sub-title:

The Right to Have Rights: Citizenship Practice and the Political Constitution of the EU

The title is usually shorter and may aim to be eye-catching; the sub-title often gives more information about the focus. After finding a relevant text, it is worth checking the following text features before starting to read:

Author

Is the writer well known in his or her field? What else has he or she published?

Publication date and edition

Do not use a first edition if there is a (revised) second edition available.

Abstract

See section 3 below.

Contents

A list of the main chapters or sections. This should tell you how much space is given to the topic you are researching.

Introduction or preface

This is where the author often explains his or her reasons for writing, and also describes how the text is organised.

References

This list shows all the sources used by the author and referred to in the text. (In the USA, this is usually called a bibliography.) It should give you some suggestions for further reading.

Bibliography

These are the sources the author has used but not specifically referred to. A bibliography is not required for most short writing tasks. (Note that in the USA this is usually the name given to the list of references.)

Index

An alphabetical list of all the topics and names mentioned in a book. If, for example, you are looking for information about a person, the index will tell you if that person is mentioned, and how often.

3 Reading abstracts

Abstracts are normally found in peer-reviewed journal articles, where they are a kind of summary to allow researchers to decide if it is worth reading the full article. As a student, you will not normally have to write abstracts, but it is important to be able to read them effectively.

■ Study this example:

Citizenship Norms and the Expansion of Political Participation

Russell J. Dalton

A growing chorus of scholars laments the decline of political participation in America, and the negative implications of this trend for American democracy. This article questions this position – arguing that previous studies misdiagnosed the sources of political change and the consequences of changing norms of citizenship for Americans' political engagement. Citizenship norms are shifting from a pattern of duty-based citizenship to engaged citizenship. Using data from the 2005 'Citizenship, Involvement, Democracy' survey of the Center for Democracy and Civil Society (CDACS) I describe these two faces of citizenship, and trace their impact on political participation. Rather than the erosion of participation, this norm shift is altering and expanding the patterns of political participation in America.

(Dalton, R. J. (2008) *Political Studies* 56 (1): 76–98)

Abstracts normally have a standard structure:

- (a) Background
- (b) Aim and thesis of paper
- (c) Method of research
- (d) Results of research

■ **Underline and label these components (a–d) in the abstract above.**

4 Fact and opinion

When reading, it is important to distinguish between facts:

Kuala Lumpur is the capital of Malaysia

and opinions:

Kuala Lumpur is a welcoming, bustling city

In addition, the reader needs to decide if the facts given are true:

Singapore lies near the equator (true)

Singapore was an ancient trading port (false)

You need to be careful of texts that contain unsupported opinion or ‘facts’ that you think are wrong.

■ **Read the following and underline facts (_____) and opinions (.....). Decide if the facts are true.**

- (a) Sydney is the capital of Australia.
- (b) Australia is a dynamic, prosperous and enterprising country.
- (c) The majority of Australians live on sheep farms.
- (d) Most Australians are open-minded and friendly.
- (e) Australia is the largest island in the world, and has extensive mineral deposits.
- (f) Among the 22 million Australians are some of the world’s best cricket players.

5 Assessing Internet sources critically

You cannot afford to waste time on texts that are unreliable or out of date. If you are using material that is not on the reading list, you must assess it critically to ensure that the material is trustworthy. Internet sources are plentiful and convenient, but you need to ask several questions about each site:

- Is this a reputable website, for example with .ac (= academic) in the URL?
- Is the name of the author given, and is he or she well known in the field?
- Is the language of the text in a suitable academic style?
- Are there any obvious errors in the text (e.g. spelling mistakes, which suggest a careless approach)?

■ Compare these two Internet texts on deforestation (the loss of forests). Which is likely to be more reliable?

1

We are destroying the last of our vital natural resources, just as we are starting to wake up to how precious they are. Rainforest once covered 14 per cent of the land now it's down to a mere 6 per cent. Scientists predict that the rest could disappear in less than 40 years. Thousands of acres are cut down each second with dire consequences for the countries involved and the planet as a whole. Scientists estimate that we loose 50,000 species every year, many species every second including 137 plant types (not even species but whole groups of plant species) and as these plants disappear before science can record them so does the chance to gain helpful knowledge and possible medicines.

2

The scale of human pressures on ecosystems everywhere has increased enormously in the last few decades. Since 1980 the global economy has tripled in size and the world population has increased by 30 percent. Consumption of everything on the planet has risen – at a cost to our ecosystems. In 2001, The World Resources Institute estimated that the demand for rice, wheat, and corn is expected to grow by 40 per cent by 2020, increasing irrigation water demands by 50 per cent or more. They further reported that the demand for wood could double by the year 2050; unfortunately it is still the tropical forests that supply the bulk of the world's demand for wood.

There are several aspects of (1) that should make the reader cautious: the style is very personal ('we are . . .') and informal ('it's down to . . .') and there is a word used wrongly ('loose' instead of 'lose'). No sources are provided. But even more disturbing is carelessness with facts. Is it really possible that thousands of acres of rainforest are being cut down *every second*? The writer also claims that many species are being lost *every second*, but if we take the figure of 50,000 per year, it means one species is lost every 10 minutes. Clearly, the writer is seeking to dramatise the subject, but it is quite unsuitable as an academic source.

In contrast, the second text is written in accurate, semi-formal language and includes a source. It seems likely to be more reliable.

6 Further practice

- Read the following texts and decide if you can trust the information. Give reasons for your decisions in the table below.

1

Hard up? Why struggle when you could live in luxury? Solve your money worries easily and quickly by working for us. No experience needed, you can earn hundreds of pounds for just a few hours' work per day. Work when it suits you, day or night. Don't delay, call today for an interview on 07795-246791.

2

If you have money problems, there's lots of ways you can save cash. Instead of spending money on new clothes, try buying them secondhand from charity shops, where you'll find lots of stylish bargains. Eating out is another big expense, but instead you can get together with a few friends and cook a meal together; it's cheaper and it's fun. Bus fares and taxis can also cost a lot, so it might be worth looking for a cheap bicycle, which lets you travel where you want, when you want.

3

Most students find that they have financial difficulties at times. It has been estimated that nearly 55 per cent experience financial difficulties in their first year at college or university. It's often hard living on a small fixed income, and the cost of accommodation and food can come as a shock when you first live away from your parents. The most important thing, if you find you are getting into debt, is to speak to a financial advisor in the Student Union, who may be able to help you sort out your problems.

- 1 _____
- 2 _____
- 3 _____

- You are writing an essay on expanding educational provision in developing countries, titled 'Improving literacy in sub-Saharan Africa'. You find the following article in a current magazine. Read it critically and decide whether you could use it in your work.

EDUCATING THE POOREST

How can we get the world's poorest children into school? This is a difficult question with no easy answer. In 1999 the UN adopted a set of goals called 'Education for All', but in many countries there has been little progress towards these aims. In Nigeria, for instance, the number of children not going to school has hardly changed since then. It is estimated that worldwide, about 72 million children never attend school, 45 per cent of whom are in sub-Saharan Africa. Even when schools and teachers are provided, there's no guarantee that teaching is being done: World Bank research in India shows that a quarter of teachers don't attend school on any one day.

Several proposals have been made to improve matters. A British academic, Professor Tooley, argues that low-cost private schools are more effective in delivering education to the poor since parental pressure maintains good standards. State schools could also relate pay to performance: research by Muralihadan and Sundararaman in India found that this improved students' test performance far more significantly than spending the same money on teaching materials.

Positive aspects: _____

Negative aspects: _____

7 Critical thinking

Even when you feel that a text is reliable and that you can safely use it as a source, it is still important to adopt a critical attitude towards it. This approach is perhaps easiest to learn when reading, but is important for all other academic work (i.e. listening, discussing and writing). Critical thinking means not just passively accepting what you hear or read, but instead actively questioning and assessing it. As you read, you should ask yourself the following questions:

- What are the key ideas in this?
- Does the argument of the writer develop logically, step by step?
- Are the examples given helpful? Would other examples be better?
- Does the author have any bias (leaning to one side or the other)?
- Does the evidence presented seem reliable, in my experience and using common sense?
- Do I agree with the writer's views?

■ Read critically the two articles on universities.

A. COLLEGE CONCERNS

Despite their dominance of global league tables (e.g. Shanghai Rankings Consultancy) American universities currently face significant criticism. The American Enterprise Institute (AEI) and the Goldwater Institute have recently published negative reports on US universities, while a highly critical book (Hacker and Dreifus) was published in 2010. The critics focus on the rising costs of American higher education, which have increased at a much faster rate than inflation, resulting in a situation where even middle-class families are finding the expense unsupportable.

Another target of criticism is the focus on research at the expense of teaching. Students rarely meet the 'star' professors, being taught instead by badly-paid graduate students. It is claimed that in one year nearly half of Harvard's history professors were on sabbatical leave. As a consequence, students work less; according to the AEI they currently study for 14 hours per week, whereas 50 years ago the figure was 24 hours per week. Despite this the proportion of students gaining a first or 2.1 degree has increased significantly: a situation described by the critics as 'grade inflation'.

B. A BRIGHTER TOMORROW?

There is little doubt that a university degree is the key to a better future for any student. Despite the costs involved in terms of fees, it has been calculated that the average UK university graduate will earn £400,000 (\$600,000) more over his or her lifetime compared to a non-graduate. Possession of a degree should also assist a graduate to find a satisfying job more quickly and give greater prospects for promotion inside the chosen career. A degree from a British university is recognised all over the world as proof of a high quality education.

A university course will not only provide students with up-to-date knowledge in their subject area, but also provide practice with the essential skills required by many employers today, such as the ability to communicate effectively using ICT, or the skills of team working and problem solving. In addition, living away from home in an international atmosphere gives the opportunity to make new friends from all over the world, and build networks of contacts that may be invaluable in a future career.

Studying at university is a unique opportunity for many young people to develop individually by acquiring independence, free from parental control. They will learn to look after themselves in a secure environment, and gain useful life skills such as cooking and budgeting. Most graduates look back at their degree courses as a valuable experience at a critical period of their lives.

- List any statements from the articles that you find unreliable, and add comments to explain your doubts in the table below. Then decide which article you find more reliable overall.

Statements	Comments
A	
B	

- See [Unit 2.1](#) Argument and Discussion

UNIT
1.4

Avoiding Plagiarism

Plagiarism is a concern for teachers and students, but it can be avoided by understanding the issues involved. In the English-speaking academic world, it is essential to use a wide range of sources for your writing and to acknowledge these sources clearly. This unit introduces the techniques students need to do this. Further practice is provided in [Units 1.7 Paraphrasing and Summarising](#) and [1.8 References and Quotations](#).

1 What is plagiarism?

Basically, plagiarism means taking ideas or words from a source (e.g. a book or journal) without giving credit (acknowledgement) to the author. It is seen as a kind of theft, and is considered to be an academic crime. In academic work, ideas and words are seen as private property belonging to the person who first thought or wrote them. Therefore, it is important for all students, including international ones, to understand the meaning of plagiarism and learn how to prevent it in their work.

The main difficulty that students face is that they are expected:

(a) to show that they have read the principal authorities on a subject – by giving citations.

BUT

(b) to explain these ideas in their own words and come to their own original conclusions.

There are several reasons why students must avoid plagiarism:

- To show that they understand the rules of the academic community
- Copying the work of others will not help them develop their own understanding
- Plagiarism is easily detected by teachers and computer software
- Plagiarism may lead to failing a course or even having to leave college

2 Acknowledging sources

If you borrow from or refer to the work of another person, you must show that you have done this by providing the correct acknowledgement. There are two ways to do this:

Summary and citation

Smith (2009) claims that the modern state wields power in new ways.

Quotation and citation

According to Smith: 'The point is not that the state is in retreat but that it is developing new forms of power . . .' (Smith, 2009: 103).

These in-text **citations** are linked to a list of **references** at the end of the main text, which includes the following details:

Author	Date	Title	Place of publication	Publisher
Smith, M.	(2009)	<i>Power and the State</i>	Basingstoke:	Palgrave Macmillan

The citation makes it clear to the reader that you have read Smith and borrowed this idea from him. This reference gives the reader the necessary information to find the source if the reader needs more detail.

► See [Unit 1.8](#) References and Quotations

3 Degrees of plagiarism

Although plagiarism essentially means copying somebody else's work, it is not always easy to define.

■ Working with a partner, consider the following academic situations and decide if they are plagiarism.

	Situation	Plagiarism? Yes/No
1	Copying a paragraph, but changing a few words and giving a citation.	Yes
2	Cutting and pasting a short article from a website, with no citation.	
3	Taking two paragraphs from a classmate's essay, without citation.	

	Situation	Plagiarism? Yes/No
4	Taking a graph from a textbook, giving the source.	
5	Taking a quotation from a source, giving a citation but not using quotation marks.	
6	Using something that you think of as general knowledge (e.g. the ownership of mobile phones is increasing worldwide).	
7	Using a paragraph from an essay you wrote and had marked the previous semester, without citation.	
8	Using the results of your own research (e.g. from a survey you did), without citation.	
9	Discussing an essay topic with a group of classmates and using some of their ideas in your own work.	
10	Giving a citation for some information but misspelling the author's name.	

This exercise shows that plagiarism can be accidental. For example, situation 10 above, when the author's name is misspelt, is technically plagiarism, but really carelessness. In situation 9, your teacher may have told you to discuss the topic in groups, and then write an essay on your own, in which case it would not be plagiarism. Self-plagiarism is also possible, as in situation 7. It can be difficult to decide what is general or common knowledge (situation 6), but you can always try asking colleagues.

However, it is not a good excuse to say that you did not know the rules of plagiarism, or that you did not have time to write in your own words. Nor is it adequate to say that the rules are different in your own country. In general, anything that is not common knowledge or your own ideas and research (published or not) must be cited and referenced.

4 Avoiding plagiarism by summarising and paraphrasing

Quotations should not be overused, so you must learn to paraphrase and summarise in order to include other writers' ideas in your work. This will demonstrate your understanding of a text to your teachers.

- Paraphrasing involves rewriting a text so that the language is significantly different while the content stays the same.
- Summarising means reducing the length of a text but retaining the main points.

► See **Unit 1.7** Paraphrasing and Summarising

Normally, both skills are used at the same time, as can be seen in the examples below.

- Read the following text and then compare the five paragraphs below, which use ideas and information from it. Decide which are plagiarised and which are acceptable, and give your reasons in the table opposite.

RAILWAY MANIAS

In 1830 there were a few dozen miles of railways in all the world – chiefly consisting of the line from Liverpool to Manchester. By 1840 there were over 4,500 miles, by 1850 over 23,500. Most of them were projected in a few bursts of speculative frenzy known as the ‘railway manias’ of 1835–1837 and especially in 1844–1847; most of them were built in large part with British capital, British iron, machines and know-how. These investment booms appear irrational, because in fact few railways were much more profitable to the investor than other forms of enterprise, most yielded quite modest profits and many none at all: in 1855 the average interest on capital sunk in the British railways was a mere 3.7 per cent.

(From *The Age of Revolution* by Eric Hobsbawm, 1995, p. 45)

- Between 1830 and 1850 there was very rapid development in railway construction world wide. Two periods of especially feverish growth were 1835–1837 and 1844–1847. It is hard to understand the reason for this intense activity, since railways were not particularly profitable investments and some produced no return at all (Hobsbawm, 1995: 45).
- There were only a few dozen miles of railways in 1830, including the Liverpool to Manchester line. But by 1840 there were over 4,500 miles and over 23,500 by 1850. Most of them were built in large part with British capital, British iron, machines and know-how, and most of them were projected in a few bursts of speculative frenzy known as the ‘railway manias’ of 1835–1837 and especially in 1844–1847. Because most yielded quite modest profits and many none at all these investment booms appear irrational. In fact few railways were much more profitable to the investor than other forms of enterprise (Hobsbawm, 1995: 45).
- As Hobsbawm (1995) argues, nineteenth century railway mania was partly irrational: ‘because in fact few railways were much more profitable to the investor

than other forms of enterprise, most yielded quite modest profits and many none at all: in 1855 the average interest on capital sunk in the British railways was a mere 3.7 per cent' (Hobsbawm, 1995: 45).

- (d) Globally, railway networks increased dramatically from 1830 to 1850; the majority in short periods of 'mania' (1835–1837 and 1844–1847). British technology and capital were responsible for much of this growth, yet the returns on the investment were hardly any better than comparable business opportunities (Hobsbawm, 1895: 45).
- (e) The dramatic growth of railways between 1830 and 1850 was largely achieved using British technology. However, it has been claimed that much of this development was irrational because few railways were much more profitable to the investor than other forms of enterprise; most yielded quite modest profits and many none at all.

	Plagiarised or acceptable?	Reason
(a)		
(b)		
(c)		
(d)		
(e)		

5 Avoiding plagiarism by developing good study habits

Few students deliberately try to cheat by plagiarising, but some develop poor study habits that result in the risk of plagiarism.

■ Working with a partner, add to the list of positive habits.

- Plan your work carefully so you do not have to write the essay at the last minute.
- Take care to make notes in your own words, not copying from the source.
- Keep a record of all the sources you use (e.g. author, date, title, page numbers, publisher).
- Make sure all your in-text citations are included in the list of references.
- _____
- _____

6 Practice

- Revise this unit by matching the words on the left with the definitions on the right.

Source	Using the exact words of the original text in your work
Citation	To gain advantage dishonestly
Summarise	Short in-text note giving the author's name and publication date
Quotation	To reduce the length of a text, but keeping the main points
Reference	Any text that students use to obtain ideas or information
To cheat	Full publication details of a text to allow a reader to access the original

7 Research

Does your college or university have a policy on plagiarism? Look on their website to find out. It may raise some issues that you want to discuss with colleagues or your teachers. If you cannot find anything for your institution, try one of these sites:

<http://owl.english.purdue.edu/owl/resource/589/01/>

www.uefap.com/writing/plagiar/plagfram.htm

UNIT
1.5



From Understanding Titles to Planning

In both exams and coursework, it is essential for students to understand what an essay title is asking them to do. A plan can then be prepared, which should make sure the question is answered fully. This unit looks at:

- key words in titles
- essay length and organisation
- alternative methods of essay planning

1 The planning process

Teachers frequently complain that students do not answer the question set, but this can be avoided by more care at the start of the process. Planning is necessary with all academic writing, but clearly there are important differences between planning in exams, when time is short, and for coursework, when preparatory reading is required. However, in both cases, the process of planning should include these three steps:

- (a) Analyse the title wording
- (b) Decide how long each section should be
- (c) Prepare an outline using your favourite method

With coursework, your outline will probably be revised as you read around the topic.

► See [Unit 4.3](#) Longer Essays

2 Analysing essay titles

Titles contain key words that tell the student what to do. Note that titles often have two (or more) parts:

What is meant by a demand curve and why would we expect it to slope downwards?

In this case, ‘what’ is asking for a description and ‘why’ for a reason or explanation.

■ Match the key words on the left to the definitions on the right.

Analyse	Give examples
Assess/Evaluate	Deal with a complex subject by reducing it to the main elements
Describe	Divide into section and discuss each critically
Discuss	Break down into the various parts and their relationships
Examine/Explore	Make a proposal and support it
Illustrate	Look at various aspects of a topic, compare benefits and drawbacks
Outline/Trace	Give a detailed account of something
Suggest	Explain a topic briefly and clearly
Summarise	Decide the value or worth of a subject

3 Practice

■ Underline the key words in the following titles and consider what they are asking you to do.

- Summarise the main reasons for the growth of e-commerce, and discuss the likely results of this.
- Describe some of the reasons why patients do not always take their medication as directed.
- What are the benefits of learning a second language at primary school (age 6–10)? Are there any drawbacks to early language learning?

- (d) What are the most significant sources of renewable energy? Evaluate their contribution to the reduction of carbon emissions.
- (e) Discuss the response of buildings and soil to earthquakes, indicating what measures can be used to ensure structural stability.

4 Brainstorming

It is often helpful to start thinking about a topic by writing down the ideas you have, in any order. Taking the example from 3(a), you might collect the following points:

Growth of e-commerce – likely results

Main reasons

- Businesses can offer a wider range of products via Internet
- More convenient for customers than travelling to shops
- Businesses can reduce overheads by centralising distribution centres
- Prices can often be lower

Likely results

- Decline in conventional shops
- Growth in delivery businesses
- Shopping centres become entertainment areas

■ Working with a partner, brainstorm ideas for the title below.

What are the benefits of learning a second language at primary school (age 6-10)? Are there any drawbacks to early language learning?

5 Essay length

Coursework essays usually have a required length, normally between 1,000 and 5,000 words. You must keep to this limit, although 5 per cent more or less is generally acceptable. However, at the planning stage, you need to consider what proportion of the essay to give to each part of the question.

As a basic guide, 20 per cent is usually sufficient for the introduction and conclusion together (references are not included in the word count). Therefore, in a 2,000-word essay, the introduction and conclusion would have 400 words and the main body 1,600 words.

If this was the length given for title 3(a) above, you might decide on the following allocation:

Main reasons	– benefits for buyers	500 words
	– benefits for sellers	300 words
Likely results	– for businesses	400 words
	– for urban development	400 words
Total		1,600 words

This calculation is useful since it can guide the amount of reading you need to do, as well as providing the basis for an outline. Moreover, it prevents you from writing an unbalanced answer, in which part of the question is not fully dealt with.

Essays in exams do not have a word limit, but it is equally important to plan them in similar terms (e.g. [part 1](#): 40 per cent, [part 2](#): 60 per cent).

- **Underline the key words in the following titles and decide what percentage of the main body to give to each part.**

Title	Part 1 (%)	Part 2 (%)
(a) Describe the typical social, cultural and environmental impacts experienced by tourist destinations in developing countries. How can harmful impacts be reduced or avoided?		
(b) How can schools make better use of IT (information technology)? Illustrate your answer with examples.		
(c) Outline the main difficulties in combating malaria. Suggest possible strategies for more effective anti-malaria campaigns.		
(d) What is 'donor fatigue' in international aid, and how can it be overcome?		

6 Outlines

An outline should help the writer to answer the question as effectively as possible. Care at this stage will save wasted effort later. The more detail you include in your outline, the easier the writing process will be.

Note that for coursework, it is usually better to write the main body first, then the introduction and finally the conclusion. Therefore, you may prefer to outline just the main body at this stage.

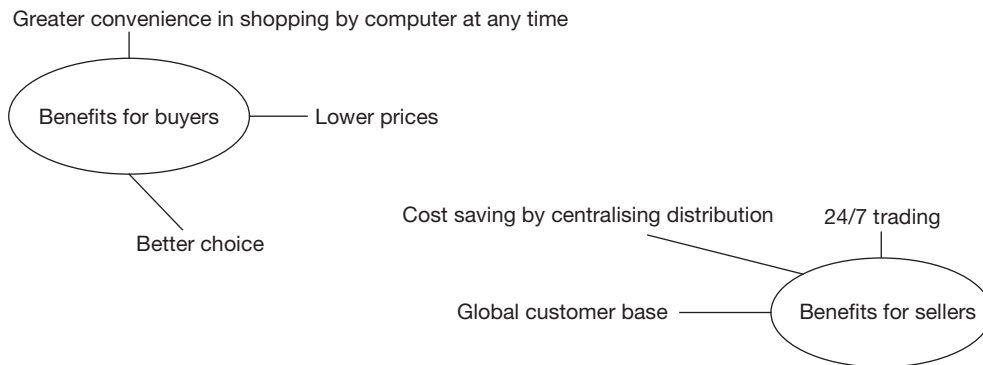
There is no fixed pattern for an outline; different methods appeal to different students. For example, with [first part](#) of title 3(a) above:

‘Summarise the main reasons for the growth of e-commerce.’

(a) The outline might be a list:

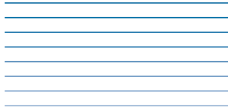
- 1 Benefits for buyers
 - greater convenience in shopping by computer at any time
 - lower prices
 - better choice
- 2 Benefits for sellers
 - cost saving by centralising distribution
 - global customer base
 - 24/7 trading

(b) An alternative is a mind map:



- Discuss the advantages and drawbacks of each method with a partner.
- Prepare an outline for the [second part](#) of the same title, using either method: ‘Discuss the likely results of this.’

UNIT
1.6



Finding Key Points and Note-making

After finding a suitable source, identifying relevant sections of text and preparing an outline, the next step is to select the key points that relate to your topic and make notes on them. This unit explains and practises this process, which also involves skills further developed in [Unit 1.7 Summarising and Paraphrasing](#).

1 Finding key points

Before making notes, you need to find the main ideas in a text. One of these is often, but not always, in the first sentence of a paragraph.

- Read the following paragraph, about the growing market for products designed for older people, and underline two key points. Then choose a title for the paragraph.

Title: _____

The generation born after the Second World War, sometimes called the baby boomers, are now reaching retirement age, and businesses are starting to realise that they are a wealthier market than any previous retirement group. Financial products, travel and medicines are well-established industries that interest the over-60s, but others are now focusing on this age group. Volkswagen, for instance, has produced a car with raised seats and more interior space to appeal to their tastes. In Japan, with its ageing population, companies have more experience of selling to the retired, and have been successful with unusual products such as a robotic seal, which serves as a

pet substitute for the lonely. There are, however, certain difficulties in selling to this market. Some customers resent being addressed as 'old' since they see themselves as more youthful, while there is a huge variation in the profile of the baby boomers, ranging from healthy and active to the bed-ridden and infirm.

2 Finding relevant points

When preparing to write an essay, you have to search for information and ideas relevant to your subject. Therefore, the key points that you select must relate to that topic. You are given an essay title: 'Does the state have a role in promoting public health?'

- Read the following article and underline five key points that relate to your essay subject.

A SLIMMER AMERICA?

In the USA there has recently been more pressure for informative food labelling, and campaigns to encourage school children to eat more fruit and vegetables. Although Americans often dislike being told what to do by their government, these campaigns may finally be having an effect. Certainly about a third of the population attempt a slimming programme every year, and although many give up, it appears that the number of people who succeed may be rising.

Currently over two-thirds of Americans are believed to be either overweight or obese, but recently it has been discovered that the situation may have stabilised. The rate of increase appears to have virtually stopped, so that on average women and children weigh no more now than they did ten years ago. This trend may have important consequences for the health care system: according to a recent study (Finkelstein *et al.*, 2009) an obese American is likely to cost the system over 40 per cent more than someone with normal weight. This is due to the increased risks of medical conditions such as diabetes, to which should be added extra costs connected with illness and resulting absence from work.

Until recently it was assumed that the long-term trend would continue so that ultimately all Americans would become overweight; Wang (2008) had estimated that this would happen by 2048. Obviously, such an assumption implies steadily rising medical insurance costs. If the new trend continues there are clear benefits for public health and the associated finances, but medical researchers still struggle to understand the basic causes of the problem, which is that obesity in America is now three times greater than fifty years ago.

There is substantial evidence that obesity is linked to social class: those with irregular and badly paid employment are more likely to eat what is convenient and tasty rather than have the time or energy to organise a healthy diet. The number of people in this category may have risen in recent years. Another possibility is that food now is cheaper relative to income, while free time is more valuable, so people are attracted to consuming convenient but often unhealthy fast food. In addition, washing machines and other devices mean that fewer calories are used in doing domestic chores around the house. Although valid, these factors apply in many other countries where the same growth in obesity has not been seen.

(Herapath, T. (2012) *Journal of Transatlantic Contexts* 14: 319)

3 Practice A

- Complete the notes for 'Does the state have a role in promoting public health?' using the key points underlined in (2) on p. 37.

Source: (Herapath, T. (2012) *Journal of Transatlantic Contexts* 14: 319)

Have Americans stopped getting fatter?

- 1 US govt. campaigns to encourage healthy eating may be succeeding
- 2 _____
- 3 _____
- 4 _____
- 5 _____

4 Why make notes?

- What are the main reasons for note-making? Add to the list below.

- (a) To prepare for essay writing
- (b) _____
- (c) _____
- (d) _____
- (e) _____

5 Note-making methods

- You are looking for information on the current media revolution. Study the text below (key points underlined) and the notes in the box on p. 40. What do you notice about the language of the notes?

- _____
- _____

THE DEATH OF THE PRESS?

A hundred years ago news was exclusively provided by newspapers. There was no other way of supplying the latest information on politics, crime, finance or sport to the millions of people who bought and read newspapers, sometimes twice a day. Today the situation is very different. The same news is also available on television, radio and the internet, and because of the nature of these media, can be more up-to-date than in print. For young people especially, the internet has become the natural source of news and comment.

This development means that in many countries newspaper circulation is falling, and a loss of readers also means a fall in advertising, which is the main income for most papers. Consequently, in both Britain and the USA newspapers are closing every week. But when a local newspaper goes out of business an important part of the community is lost. It allows debate on local issues, as well as providing a noticeboard for events such as weddings and society meetings.

All newspapers are concerned by these developments, and many have tried to find methods of increasing their sales. One approach is to focus on magazine-type articles rather than news, another is to give free gifts such as DVDs, while others have developed their own websites to provide continuous news coverage. However, as so much is now freely available online to anyone with a web browser, none of these have had a significant impact on the steady decline of paid-for newspapers.

(Source: *New Business Monthly*, May 2013, p. 37)

Decline of Newspapers *New Business Monthly*, May 2013, p. 37)

(a) Newspapers only source of news 100 yrs ago – now also TV, radio + www

(b) Newspaper sales > decline in advertising > newspapers shutting

- (c) Attempts to attract readers:
- more magazine content
 - free gifts
 - websites

but none very effective

6 Effective note-making

Notes are for your personal use so you should create your own style. Your teachers will not read or mark them, but you need to make sure you can still understand your notes months after reading the original book or article:

- (a) To avoid the risk of plagiarism, you must use your own words and not copy phrases from the original.
- (b) The quantity of notes you make depends on your task: you may only need a few points, or a lot of detail.
- (c) Always record the source of your notes. This will save time when you have to write the list of references.
- (d) Notes are often written quickly, so keep them simple. Do not write sentences. Leave out articles (a/the) and prepositions (of/to).
- (e) If you write lists, it is important to have clear headings (underlined) and numbering systems (a, b, c, or 1, 2, 3) to organise the information. Do not crowd your notes.
- (f) Use symbols (+, >, =) to save time.
- (g) Use abbreviations (e.g. = for example). You need to make up your own abbreviations for your subject area. But do not abbreviate too much, or you may find your notes hard to understand in the future!

► See **Unit 3.2 Abbreviations**

7 Practice B

You have to write an essay titled ‘Improving student performance: an outline of recent research.’

- Read the following text, underline the relevant key points and make notes on them.

SLEEP AND MEMORY

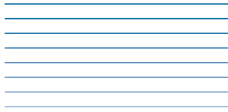
In many countries, especially in hot climates, it is the custom to take a short sleep in the afternoon, often known as a siesta. Now it appears that this habit helps to improve the ability to remember and therefore to learn. Researchers have known for some time that new memories are stored short-term in an area of the brain called the hippocampus, but are then transferred to the pre-frontal cortex for long-term storage. They now believe that this transfer process occurs during a kind of sleep called stage 2 non-REM sleep. After this has occurred the brain is better able to take in new information, and having a sleep of about 100 minutes after lunch seems to be an effective way to permit this.

Research by a team from the University of California sought to confirm this theory. They wanted to establish that a short sleep would restore the brain’s ability to learn. A group of about 40 people were asked to take part in two ‘lessons’; at 12 noon and 6 pm. Half the volunteers were put in a group which stayed awake all day, while the others were encouraged to sleep for an hour and a half after the first session. It was found that in the evening lesson the second group were better at remembering what they had learnt, which indicates that the siesta had helped to refresh their short-term memories.

The most effective siesta seems to consist of three parts: roughly 30 minutes of light sleep to rest the body, followed by 30 minutes of stage 2 sleep which clears the hippocampus, and finally 30 minutes of REM sleep which is when dreams are experienced: possibly as a result of the new memories being processed as they are stored in the pre-frontal cortex. This process is believed to be so valuable that some researchers argue that a siesta can be as beneficial as a full night’s sleep.

(Kitschelt, P. (2006) *How the Brain Works*. Berlin: Freihaus, p. 73)

UNIT
1.7



Summarising and Paraphrasing

Summarising and paraphrasing are normally used together in essay writing. Summarising aims to reduce information to a suitable length, allowing the writer to condense lengthy sources into a concise form, while paraphrasing means changing the wording of a text so that it is significantly different from the original source, without changing the meaning. Both are needed to avoid the risk of plagiarism, and this unit practises them separately and jointly.

1 What makes a good summary?

Summarising is a common activity in everyday life. It is used to describe the main features of the subject.

■ Write a short description of one of the topics below in no more than 20 words.

- (a) A book you have enjoyed
- (b) A town or city you know well
- (c) A film you have recently watched

- Compare your summary with others in your class. What is needed for a good summary?

- _____
- _____
- _____

2 Stages of summarising

Summarising is a flexible tool. You can use it to give a one-sentence outline of an article, or to provide much more detail, depending on your needs. Generally, a summary focuses on the main ideas and excludes examples or supporting information. In every case, the same basic steps need to be followed in order to meet the criteria discussed in (1) on p. 42.

- Study the stages of summary writing below, which have been mixed up. Put them in the correct order (1–5).

- (a) Write the summary from your notes, reorganising the structure if needed.
- (b) Make notes of the key points, paraphrasing where possible.
- (c) Read the original text carefully and check any new or difficult vocabulary.
- (d) Mark the key points by underlining or highlighting.
- (e) Check the summary to ensure it is accurate and nothing important has been changed or lost.

3 Practice A

- Read the following text and the summaries that follow. Which is best? Give reasons.

MECHANICAL PICKERS

Although harvesting cereal crops such as wheat and barley has been done for many years by large machines known as combine harvesters, mechanising the picking of fruit crops such as tomatoes or apples has proved more difficult. Farmers have generally relied on human labour to harvest these, but in wealthy countries it has become increasingly difficult to find people willing to work for the wages farmers are able to pay. This is partly because the demand for labour is seasonal, usually in the autumn, and also because the work is hard. As a result, in areas such as California part of the fruit harvest is often unpicked and left to rot.

There are several obvious reasons why developing mechanical pickers is challenging. Fruit such as grapes or strawberries comes in a variety of shapes and does not always ripen at the same time. Outdoors, the ground conditions can vary from dry to muddy, and wind may move branches around. Clearly each crop requires its own solution: machines may be towed through orchards by tractors or move around by themselves, using sensors to detect the ripest fruit.

This new generation of fruit harvesters is possible due to advances in computing power and sensing ability. Such devices will inevitably be expensive, but will save farmers from the difficulty of managing a labour force. In addition, the more intelligent pickers should be able to develop a database of information on the health of each individual plant, enabling the grower to provide it with fertiliser and water to maintain its maximum productivity.

- (a) Fruit crops have usually been picked by hand, as it is difficult to mechanise the process. But in rich countries it has become hard to find affordable pickers at the right time, so fruit is often wasted. Therefore, intelligent machines have been developed that can overcome the technical problems involved, and also provide farmers with useful data about the plants.
- (b) Developing machines that can pick fruit such as tomatoes or apples is a challenging task, due to the complexity of locating ripe fruit in an unpredictable outdoor environment, where difficult conditions can be produced by wind or water. But recent developments in computing ability mean that growers can now automate this process, which should save them money and increase their profits.
- (c) Strawberries and grapes are the kind of crops that have always been hand-picked. But many farmers, for example in California, now find it increasingly difficult to attract enough pickers when the fruit is ripe. However, computing advances have produced a solution to this problem that will save farmers from worrying about the pickers, and also collect vital data.

- 1) _____

- 2) _____

- 3) _____

4 Practice B

- (a) Read the following text and underline the key points.

- See [Unit 1.6](#) Finding Key Points and Note-making

WEALTH AND FERTILITY

For most of the past century an inverse correlation between human fertility and economic development has been found. This means that as a country got richer, the average number of children born to each woman got smaller. While in the poorest countries women often have eight children, the rate fell as low as 1.3 children per woman in some European countries such as Italy, which is below the replacement rate. Such a low rate has two likely negative consequences: the population will fall in the long-term, and a growing number of old people will have to be supported by a shrinking number of young.

But a recent study by researchers from Pennsylvania University suggests that this pattern may be changing. They related a country's fertility rates to its human development index (HDI), a figure with a maximum value of 1.0 which assesses life expectancy, average income and education level. Over 20 countries now have an HDI of more than 0.9, and in a majority of these the fertility rate has started to increase, and in some is approaching two children per woman. Although there are exceptions such as Japan, it appears that rising levels of wealth and education eventually translate into a desire for more children.

- (b) Complete the notes of the key points below.

- (i) Falling levels of fertility have generally been found _____
- (ii) In some, number of children born _____
- (iii) Two results: smaller populations and _____
- (iv) Recent research claims that _____
- (v) Comparison of HDI (human development index: life expectancy/income/education) with fertility rate found that in most highly rated (+ 0.9) countries, _____

- (c) Join the notes together and expand them to make the final summary. Check that the meaning is clear and no important points have been left out. Find a suitable title.

Title: _____

This summary is about 35 per cent of the original length, but it could be summarised further.

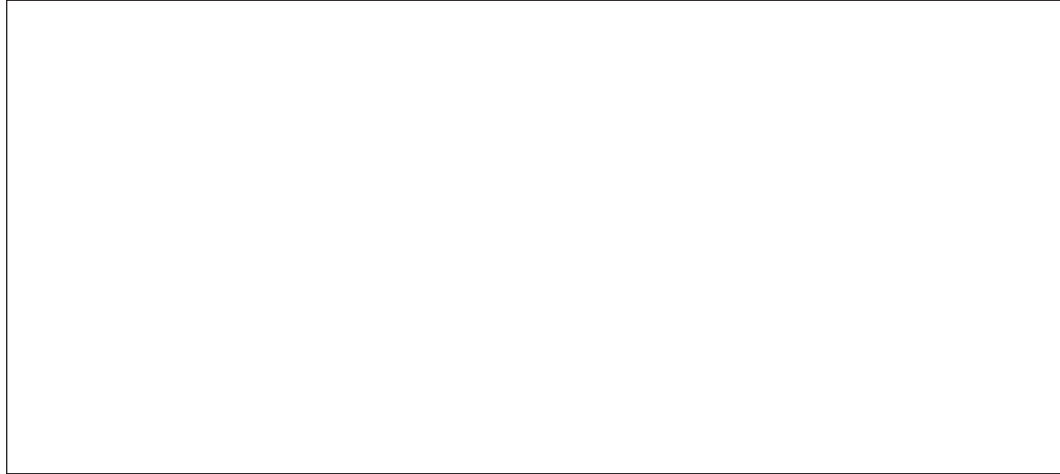
- (d) Summarise the summary in no more than 20 words.

5 Practice C

- Summarise the following text in about 50 words.

THE LAST WORD IN LAVATORIES?

Toto is a leading Japanese manufacturer of bathroom ceramic ware, with annual worldwide sales of around \$5 bn. One of its best-selling ranges is the Washlet lavatory, priced at up to \$5,000 and used in most Japanese homes. This has features such as a heated seat, and can play a range of sounds. This type of toilet is successful in its home market since many flats are small and crowded, and bathrooms provide valued privacy. Now Toto hopes to increase its sales in Europe and America, where it faces a variety of difficulties. European countries tend to have their own rules about lavatory design, so that different models have to be made for each market. Although Toto claims that its Washlet toilet uses less water than the average model, one factor which may delay its penetration into Europe is its need for an electrical socket for installation, as these are prohibited in bathrooms by most European building regulations.



6 Paraphrasing

Paraphrasing and summarising are normally used together in essay writing, but while summarising aims to **reduce** information to a suitable length, paraphrasing attempts to **restate** the relevant information. For example, the following sentence:

There has been much debate about the reasons for the Industrial Revolution happening in eighteenth-century Britain, rather than in France or Germany.

could be paraphrased:

Why the Industrial Revolution occurred in Britain in the eighteenth century, instead of on the continent, has been the subject of considerable discussion.

Note that an effective paraphrase usually:

- has a different structure to the original
- has mainly different vocabulary
- retains the same meaning
- keeps some phrases from the original that are in common use (e.g. ‘Industrial Revolution’ or ‘eighteenth century’)

7 Practice D

- Read the text below and then rank the three paraphrases in order of accuracy and clarity (1–3), giving reasons.

THE CAUSES OF THE INDUSTRIAL REVOLUTION

Allen (2009) argues that the best explanation for the British location of the Industrial Revolution is found by studying demand factors. By the early eighteenth century high wages and cheap energy were both features of the British economy. Consequently, the mechanisation of industry through such inventions as the steam engine and mechanical spinning was profitable because employers were able to economise on labour by spending on coal. At that time, no other country had this particular combination of expensive labour and abundant fuel.

- (a) A focus on demand may help to explain the UK origin of the industrial revolution. At that time, workers' pay was high, but energy from coal was inexpensive. This encouraged the development of mechanical inventions based on steam power, which enabled bosses to save money by mechanising production (Allen, 2009).
- (b) The reason why Britain was the birthplace of the industrial revolution can be understood by analysing demand in the early 1700s, according to Allen (2009). He maintains that, uniquely, Britain had the critical combination of cheap energy from coal and high labour costs. This encouraged the adoption of steam power to mechanise production, thus saving on wages and increasing profitability.
- (c) Allen (2009) claims that the clearest explanation for the UK location of the Industrial Revolution is seen by examining demand factors. By the eighteenth century, cheap energy and high wages were both aspects of the British economy. As a result, the mechanisation of industry through inventions such as the steam engine and mechanical spinning was profitable because employers were able to save money on employees by spending on coal. At that time, Britain was the only country with significant deposits of coal.

- 1) _____

- 2) _____

- 3) _____

8 Techniques for paraphrasing

- (a) Changing vocabulary by using synonyms:

argues > claims/eighteenth century > 1700s/wages > labour costs/economise > saving

- (b) Changing word class:

explanation (n.) > explain (v.)/mechanical (adj.) > mechanise (v.)/profitable (adj.) > profitability (n.)

- (c) Changing word order:

... the best explanation for the British location of the Industrial Revolution is found by studying demand factors.

> A focus on demand may help explain the UK origin of the Industrial Revolution.

Note that in practice, all these three techniques are used at the same time. Do not attempt to paraphrase every word, since some have no true synonym (e.g. demand, economy).

► See [Units 3.3 and 3.4 Academic Vocabulary](#) and [3.9 Synonyms](#)

9 Practice E

■ Read the following text.

BRAINS AND SEX

It is widely agreed that men and women think and act in different ways. Women appear to have better memories, better social skills and are more competent at multi-tasking. Men, in contrast, seem to focus better on issues and have superior motor and spatial skills, although clearly many people are exceptions to these patterns.

These differences have been explained as behaviour adopted thousands of years ago, when the men went hunting while the women stayed at home and cared for their children. But another approach is to see the behaviour as a result of the way our brains function.

Recent research by Ragini Verma's team at the University of Pennsylvania has used brain scans to compare 428 men and 521 women. They tracked the pathways of water molecules around the brain area, and found fascinating differences.

The top half of the brain is called the cerebrum, and it is divided into a left and a right half. The left hemisphere is thought to be the home of logic and the right is the

centre of intuition. Dr Verma found that with women most of the pathways went between the two halves, while with men they stayed inside the hemispheres. She believes that these results explain the gender differences in ability, such as women's social competence compared to men's more intense focus.

- Find synonyms for the words underlined. Rewrite the paragraph using these.

It is widely agreed that men and women think and act in different ways. Women appear to have better memories, better social skills and are more competent at multi-tasking. Men, in contrast, seem to focus better on issues and have superior motor and spatial skills, although clearly many people are exceptions to these patterns.

- Change the word class of the underlined words. Rewrite the paragraph using the changes.

These differences have been explained as behaviour adopted thousands of years ago, when the men went hunting while the women stayed at home and cared for their children. But another approach is to see the behaviour as a result of the way our brains function.

- Change the word order of these sentences, rewriting the paragraph so that the meaning stays the same.

Recent research into brain functioning by Ragini Verma's team at the University of Pennsylvania has used brain scans to compare 428 men and 521 women. They tracked the pathways of water molecules around the brain area, and found fascinating differences.

- Combine all three techniques to paraphrase the final paragraph.

The top half of the brain is called the cerebrum, and it is divided into a left and a right half. The left hemisphere is thought to be the home of logic and the right is the centre of intuition. Dr Verma found that with women most of the pathways went between the two halves, while with men they stayed inside the hemispheres. She believes that these results explain the gender differences in abilities, such as women's social competence compared to men's more intense focus on a limited area.

10 Practice F

- Use the same techniques to paraphrase the following text.

THE PAST BELOW THE WAVES

More than three million shipwrecks are believed to lie on the sea bed, the result of storms and accidents during thousands of years of sea-borne trading. These wrecks offer marine archaeologists valuable information about the culture, technology and trade patterns of ancient civilizations, but the vast majority have been too deep to research. Scuba divers can only operate down to 50 metres, which limits operations to wrecks near the coast, which have often been damaged by storms or plant growth. A few deep sea sites (such as the *Titanic*) have been explored by manned submarines, but this kind of equipment has been too expensive for less famous subjects. However, this situation has been changed by the introduction of a new kind of mini submarine: the automatic underwater vehicle (AUV). This cheap, small craft is free moving and does not need an expensive mother-ship to control it. Now a team of American archaeologists are planning to use an AUV to explore an area of sea north of Egypt, which was the approach to a major trading port 4,000 years ago.

UNIT
1.8

References and Quotations

Academic work depends on the research and ideas of others, so it is vital to show which sources you have used in your work, in an acceptable manner. This unit explains:

- the format of in-text citation
- the main reference systems
- the use of quotations
- the layout of lists of references

1 Why use references?

There are three principal reasons for providing references and citations:

- (a) To show that you have read some of the authorities on the subject, which will give added weight to your writing.
- (b) To allow readers to find the source, if they wish to examine the topic in more detail.
- (c) To avoid plagiarism.

► See [Unit 1.4](#) Avoiding Plagiarism

■ Decide if you need to give a reference in the following cases.

- (a) Data you found from your own primary research
- (b) A graph from an Internet article

Yes/No

- (c) A quotation from a book _____
- (d) An item of common knowledge _____
- (e) A theory from a journal article _____
- (f) An idea of your own based on reading several sources _____

2 Citations and references

It is important to refer correctly to the work of other writers that you have used. You may present these sources as a summary/paraphrase, as a quotation, or use both. In each case, a citation is included to provide a link to the list of references at the end of your paper:

Smith (2009) argues that the popularity of the Sports Utility Vehicle (SUV) is irrational, as despite their high cost most are never driven off-road. In his view, 'they are bad for road safety, the environment and road congestion' (Smith, 2009: 37).

References

Smith, M. (2009) *Power and the State*. Basingstoke: Palgrave Macmillan.

- Underline the citations in the example above. Which is for a summary and which a quotation? What are the advantages of each?

Giving citations

A quotation Author's name, date of publication, page number (Smith, 2009: 37)

A summary Author's name, date of publication Smith (2009)

3 Reference verbs

Summaries and quotations are usually introduced by a reference verb:

Smith (2009) argues that . . .

Janovic (1972) claimed that . . .

These verbs can be either in the present or the past tense. Normally, the use of the present tense suggests that the source is recent and still valid, while the past indicates that the source is older and may be out of date, but there are no hard-and-fast rules. In some disciplines, an older source may still be useful.

- See **Unit 3.4.2 Academic Vocabulary: Verbs and Adverbs: Verbs of Reference**

4 Reference systems

There are several main systems of referencing employed in the academic world, each used by different subjects. Your teachers will normally give you guidelines, or you may find these on the library website. With any system, the most important point is to be consistent (i.e. to use the same font size, punctuation, etc. throughout). These are the principal systems:

- (a) **The Harvard system**, generally used for the social sciences and business, illustrated in (2) on p. 53.
- (b) **The Vancouver system**, widely used in medicine and science. Numbers in brackets are inserted after the citation and these link to a numbered list of references:

Jasanoff (5) makes the point that the risk of cross-infection is growing.

References

- (5) Jasanoff, M. *Tuberculosis: A Sub-Saharan Perspective*. New York: Schaffter (2001).

- (c) **The footnote/endnote system**, commonly used in the humanities, in which sources are listed at the bottom of the page or at the end of the paper. The numbers in superscript run consecutively throughout the paper:

The effects of the French Revolution were felt throughout Europe.³

- 3 Karl Wildavsky, *The End of an Era: Spain 1785–1815* (Dublin: Dublin University Press, 2006), p. 69.

Referencing is a complex subject, and students should use an online reference guide for detailed information. Your university library may provide one.

Sussex University provides a convenient guide to the different systems at:

www.sussex.ac.uk/library/infosuss/referencing/index.shtm

5 Using quotations

■ Discuss with a partner the reasons for using quotations in your written work.

Using a quotation means bringing the original words of a writer into your work. Quotations are effective in some situations, but must not be overused (e.g. to pad out your work) They can be valuable:

- when the original words express an idea in a distinctive way
- when the original is more concise than your summary could be
- when the original version is well known

All quotations should be introduced by a phrase that shows the source, and also explains how this quotation fits into your argument:

Introductory phrase	Author	Reference verb	Quotation	Citation
This view is widely shared;	as Friedman	stated:	‘Inflation is the one form of taxation that can be imposed without legislation’	(1974: 93).

- (a) Short quotations (2–3 lines) are shown by single quotation marks. Quotations inside quotations (nested quotations) use double quotation marks:

As James remarked: ‘Martin’s concept of “internal space” requires close analysis.’

- (b) Longer quotations are either indented (given a wider margin) and/or printed in smaller type. In this case, quotation marks are not needed.

- (c) Page numbers should be given after the date.

- (d) Care must be taken to ensure that quotations are the exact words of the original. If it is necessary to delete some words that are irrelevant, use points (. . .) to show where the missing section was:

Few inventions . . . have been as significant as the mobile phone.’

- (e) It may be necessary to insert a word or phrase into the quotation to clarify a point. This can be done by using square brackets:

‘modern ideas [of freedom] differ radically from those of the ancient world . . .’

6 Practice

- Study the following paragraph from an article titled 'The mobile revolution' in the journal *Development Quarterly* (Issue 34, pages 85–97, 2012) by K. Hoffman.

According to recent estimates there are at least 4 billion mobile phones in the world, and the majority of these are owned by people in the developing world. Ownership in the developed world reached saturation level by 2007, so countries such as China, India and Brazil now account for most of the growth. In the poorest countries, with weak transport networks and unreliable postal services, access to telecommunications is a vital tool for starting or developing a business, since it provides access to wider markets. Studies have shown that when household incomes rise, more money is spent on mobile phones than any other item.

- Compare the following:

(a) **Summary**

Hoffman (2012) points out that the main market for mobile phones is now the developing world, and stresses the critical importance of mobile phones for the growth of small businesses there.

(b) **Quotation**

According to Hoffman, mobile phone ownership compensates for the weaknesses of infrastructure in the developing world: 'In the poorest countries, with weak transport networks and unreliable postal services, access to telecommunications is a vital tool for starting or developing a business, since it provides access to wider markets' (2012: 87).

(c) **Summary and quotation**

Hoffman points out that most of the growth in mobile phone ownership now takes place in the developing world, where it has become crucial for establishing a business: '... access to telecommunications is a vital tool for starting or developing a business, since it provides access to wider markets' (2012: 87).

- Read the next paragraph of the same article, also on p. 87.

In such countries the effect of phone ownership on GDP growth is much stronger than in the developed world, because the ability to make calls is being offered for the first time, rather than as an alternative to existing landlines. As a result, mobile phone operators have emerged in Africa, India and other parts of Asia that are larger and more flexible than Western companies, and which have grown by catering for poorer customers, being

therefore well-placed to expand downmarket. In addition Chinese phone makers have successfully challenged the established Western companies in terms of quality as well as innovation. A further trend is the provision of services via the mobile network which offer access to information about topics such as healthcare or agriculture.

- Write a summary of the main point, including a citation.
- Introduce a quotation to show the key point, referring to the source.
- Combine the summary and the quotation, again acknowledging the source.

7 Abbreviations in citations

In-text citations use the following abbreviations, derived from Latin and printed in italics:

et al.: Usually used when three or more authors are given. The full list of names is given in the reference list:

Many Americans fail to vote (Hobolt et al., 2006: 137).

ibid.: taken from the same source (i.e. the same page) as the previous citation:

Older Americans are more likely to vote than the young (ibid.) . . .

op cit.: taken from the same source as previously, but a different page.

Note that journal articles increasingly tend to use full citations, but students should still use the above in their work.

8 Secondary references

It is quite common to find a reference to an original source in the text you are reading. For instance, if you are reading a text by Graham, you may find:

In relation to post-natal infections, Poledna (2008) points out that the rate of infection fell when midwives were literate.

You may wish to use this information from the original (i.e. Poledna) in your writing, even if you have not read the whole work. This is known as a secondary reference. If it is not possible to locate the original, you can refer to it thus:

Polenda (2008), cited in Graham (2011: 241) argued that the rate of infection fell . . .

You must include the work you have read in the list of references (i.e. Graham).

9 Organising the list of references

There are many software systems available (e.g. RefWorks or Endnote) that automate the making of a list of references. Using one of them not only saves time, but may also help to produce a more accurate result. Some are free and others require payment, but if you search your library website you may find one that you can access without charge.

At the end of an essay or report, there must be a list of all the sources cited in the writing. In the Harvard system, illustrated here, the list is organised alphabetically by the family name of the author. You should be clear about the difference between first names and family names. On title pages, the normal format of first name, then family name is used:

Sheila Burford, Juan Gonzalez

But in citations, only the family name is usually used:

Burford (2001), Gonzalez (1997)

In reference lists, use the family name and the initial(s):

Burford, S., Gonzalez, J.

If you are not sure which name is the family name, ask a classmate from that cultural background.

- Study the reference list below, from an essay on the effects of age on second language learning, and answer the following questions.

REFERENCES

Bialystock, E. (1997) 'The structure of age: in search of barriers to second language acquisition', *Second Language Research* 13 (2): 116–137.

Dörnyei, Z. (2009) *The Psychology of Second Language Acquisition*. Oxford: Oxford University Press.

Flege, J. (1999) 'Age of learning and second language speech' in Birdsong, D. (ed.) *Second Language Acquisition and the Critical Period Hypothesis*. London: Lawrence Erlbaum Associates, 101–132.

Gass, S. and Selinker, L. (2001) *Second Language Acquisition: An Introductory Course*. London: Lawrence Erlbaum Associates.

Larson-Hall, J. (2008) 'Weighing the benefits of studying a foreign language at a

younger starting age in a minimal input situation'. *Second Language Research* 24 (1): 35–63.

Myles, F. (nd) 'Second language acquisition (SLA) research: its significance for learning and teaching issues'. Subject Centre for Languages, Linguistics and Area Studies. www.llas.ac.uk/resources/gpg/421. Accessed 1 May 2013.

The International Commission on Second Language Acquisition (nd) 'What is SLA?' www.hw.ac.uk/langWWW/icsla/icsla.htm#SLA. Accessed 6 May 2013.

(a) Find an example of:

(i) a book by one author

(ii) a journal article

(iii) a chapter in an edited book

(iv) an authored undated website article

(v) an anonymous webpage

(vi) a book by two authors

(b) What are the main differences in the way these sources are referenced?

(i) _____

(ii) _____

(iii) _____

(iv) _____

(v) _____

(vi) _____

- (c) When are italics used?
- (d) How are capital letters used in titles?
- (e) How is a source with no given author listed?
- (f) Write citations for summaries from each of the sources.

- (i) _____
- (ii) _____
- (iii) _____
- (iv) _____
- (v) _____
- (vi) _____
- (vii) _____



References

UNIT 1.9

Combining Sources

For most assignments, students are expected to read a range of sources, often containing conflicting views on a topic. In some cases, the contrast between the various views may be the focus of the task. This unit explains how writers can present and organise a range of contrasting sources.

1 Mentioning sources

In the early stages of an essay, it is common to refer to the views of other writers on the subject, to show that you are familiar with their work, and that your work will take their research into account.

- Read the following example, from a study of ‘technology readiness’ in consumers, and answer the questions below.

The extent to which consumers desire to use new technology is commonly influenced by factors such as consumer attitudes toward specific technologies (Bobbitt and Dabholkar, 2001; Curran *et al.*, 2003), the level of technology anxiety exhibited by consumers (Meuter, Ostrom, Bitner and Roundtree, 2003), and consumer capacity and willingness (Walker, Lees, Hecker and Francis, 2002). Mick and Fournier (1998) argue that consumers can simultaneously exhibit positive feelings (such as intelligence and efficacy) and negative feelings (such as ignorance and ineptitude) towards new technology. Venkatesh (2000) found that ‘computer playfulness’ and ‘computer anxiety’ serve as anchors that users employ in forming perceptions of ease of use about new technology.

- (a) How many sources are mentioned here?
- (b) What was the subject of Meuter, Ostrom, Bitner and Roundtree's research?
- (c) Which source contrasted fear of computers with playing with computers?
- (d) Which source examined the paradox of positive and negative attitudes to computers?
- (e) How many sources are cited that studied attitudes to particular technologies?

► See [Unit 4.2 Literature Reviews](#)

2 Taking a critical approach

It is important to compare a range of views to show that you are familiar with different and conflicting views on a topic. This is because most subjects worth studying are the subject of debate. The two texts below reflect different views on the topic of climate change.

- Read them both and then study the extract from an essay that contrasts the two sources. Answer the questions that follow.

2.1 WHY THE EARTH IS HEATING UP

Most scientists now agree that global temperatures have risen over the last century, and that this trend is reflected in such phenomena as the melting of sea ice and the retreat of glaciers. There is a near-consensus that over the period the level of carbon dioxide (CO₂) in the earth's atmosphere has also risen, mainly as a result of burning fossil fuels such as coal and oil. The common view is that the first change is the result of the second; in other words a warmer climate has been caused by the CO₂, which has the effect of causing the heat from the sun's rays to be trapped inside the atmosphere; the so-called 'greenhouse effect'. If these theories are accepted it can be expected that temperatures will continue to increase in future as carbon dioxide levels rise, and since this will have harmful effects on agriculture and other human activities, efforts should be made to reduce the burning of fossil fuels.

(Lombardo, 2009)

2.2 DOUBTS ABOUT GLOBAL WARMING

The conventional view that global warming is caused by a rise in carbon dioxide levels has been criticised on a number of grounds. Some critics claim that the recent

period of warming is part of a natural cycle of temperature fluctuations that have been recorded over the past few thousand years. They point out that Europe experienced a warm period about 800 years ago which was unrelated to CO₂ levels. Other critics question the reliability of the basic temperature data, and maintain that the apparent rise in temperatures is caused by the growth of cities, regarded as 'heat islands'. In addition some claim that the warming is caused by a reduction in cloud cover, allowing more sunlight to reach the earth's surface. This effect, they believe, is the result of solar activity or sunspots, which are known to fluctuate on an 11-year cycle. As a result of these doubts, sceptics argue that there is no need to attempt to reduce the industrial activity that causes carbon dioxide to be produced.

(Wong, 2011)

2.3 HOW STRONG IS THE EVIDENCE FOR GLOBAL WARMING?

Lombardo (2009) puts forward the view that the significant rise in the earth's temperature over the past century is the product of increased levels of atmospheric CO₂ caused by greater use of fossil fuels. He maintains that this position is now generally agreed, and that steps should be taken to reduce future warming by restricting the output of greenhouse gases such as carbon dioxide. However, Wong (2011) presents a range of counterarguments. She mentions evidence of historical climate change that cannot have been caused by rising levels of CO₂, and also discusses the difficulty of obtaining reliable data on temperature changes, as well as other claims that solar activity may affect the amount of cloud cover and hence temperature levels. Such uncertainty, she considers, raises doubts about the value of cutting CO₂ production.

- (a) 2.3 above summarises ideas from both Lombardo and Wong. Find two examples of a summary in the extract and match them with the original text from 2.1 or 2.2.

Example:

Summary	Original
<i>... the significant rise in the earth's temperature over the past century is the product of increased levels of atmospheric CO₂ caused by greater use of fossil fuels.</i>	<i>There is a near-consensus that over the period the level of carbon dioxide (CO₂) in the earth's atmosphere has also risen, mainly as a result of burning fossil fuels.</i>

Summary	Original

- (b) Which verbs are used to introduce the summaries?
- (c) Which word marks the point where the writer switches from summarising Lombardo to Wong?
- (d) What other words or phrases could be used at this point?

3 Combining three sources

- Read the text on climate change below, and then complete paragraph 2.3 on p. 63 titled 'How strong is the evidence for global warming?' by summarising Lahav's comments.

THE SCEPTICAL CASE

Debate on the issues around climate change have intensified recently, since while most scientists agree that global temperatures are rising as a result of ever-higher levels of carbon dioxide in the earth's atmosphere, a minority continue to argue that the rise is insignificant, short-term or unrelated to CO₂ levels. The controversy clearly has important political and economic implications, since international agreement is needed to control the output of greenhouse gases. Climate sceptics insist that computer models are unable to handle the complexity of the world's weather systems, and so should not be used as a basis for making major decisions. Their view is that because the science of global warming is uncertain, the money that would be spent, for example, on building wind farms could be better spent on improving health and education in the developing world.

(Lahav, 2010)

4 Practice

The three texts below reflect different approaches to the topic of globalisation.

- Read them all and then complete the paragraph from an essay titled ‘Globalisation mainly benefits multinational companies rather than ordinary people – discuss’, using all three sources.

4.1 THE BENEFITS OF GLOBALISATION

It has been argued that globalisation is not a new phenomenon, but has its roots in the age of colonial development in the seventeenth and eighteenth centuries. However, its modern use can be dated to 1983, when Levitt’s article ‘The Globalisation of Markets’ was published. Among the many definitions of the process that have been suggested, perhaps the simplest is that globalisation is the relatively free movement of services, goods, people and ideas world-wide. An indication of the positive effect of the process is that cross-border world trade, as a percentage of global GDP, was 15 per cent in 1990 but is expected to reach 30 per cent by 2017. Among the forces driving globalisation in the last two decades have been market liberalisation, cheap communication via the internet and telephony, and the growth of the BRIC (Brazil, Russia, India and China) economies.

(Costa, L., 2008)

4.2 GLOBALISATION – DRAWBACKS

Considerable hostility to the forces of globalisation has been demonstrated in both the developed and developing worlds. In the former, there is anxiety about the outsourcing of manufacturing and service jobs to countries that offer cheaper labour, while developing countries claim that only a minority have benefited from the increase in world trade. They point out that per-capita income in the 20 poorest countries has hardly changed in the past 40 years, while in the richest 20 it has tripled. The markets of Western nations are still closed to agricultural products from developing countries, and while there is free movement of goods and capital, migration from poor countries to rich ones is tightly controlled.

(Lin Y., 2006)

4.3 MULTI-NATIONALS AND GLOBALISATION

Multi-national companies have undoubtedly benefited from the relaxation of the import tariff regimes which previously protected local firms, allowing them to

operate more freely in markets such as India which have recently liberalised. These corporations have evolved two distinct approaches to the challenge of globalisation. Some, e.g. Gillette, have continued to produce their products in a few large plants with strict control to ensure uniform quality worldwide, while others, for instance Coca-Cola, vary the product to suit local tastes and tend to manufacture their goods on the spot. They claim that an understanding of regional differences is essential for competing with national rivals.

(Brokaw, P., 2012)

Globalisation mainly benefits multinational companies rather than ordinary people – discuss.

There is good evidence that globalisation has resulted in a considerable increase in world trade over the past 20-30 years ...

UNIT
1.10

Organising Paragraphs

Paragraphs are the basic building blocks of academic writing. Well-structured paragraphs help the reader understand the topic more easily by dividing up the argument into convenient sections. This unit looks at:

- the components of paragraphs
- the way the components are linked together
- the linkage between paragraphs in the overall text

1 Paragraph structure

■ Discuss the following questions with a partner.

- What is a paragraph?
- What is the normal length of a paragraph?
- Is there a standard structure for paragraphs?
- How is a paragraph linked together?

2 Example paragraph

■ Study the paragraph below. It is from the introduction to an essay titled 'Should home ownership be encouraged?'

The rate of home ownership varies widely across the developed world. Germany, for instance, has one of the lowest rates, at 42 per cent, while in Spain it is twice as high, 85 per cent. Both the USA and Britain have similar rates of about 70 per cent. The reasons for this variation appear to be more

cultural and historic than economic, since high rates are found in both rich and poorer countries. There appears to be no conclusive link between national prosperity and the number of home owners.

This paragraph can be analysed:

- | | | |
|---|-----------------------|---|
| 1 | Topic sentence | The rate of home ownership varies widely across the developed world. |
| 2 | Example 1 | Germany, for instance , has one of the lowest rates, at 42 per cent, while in Spain it is twice as high, 85 per cent. |
| 3 | Example 2 | Both the USA and Britain have similar rates of about 70 per cent. |
| 4 | Reason | The reasons for this variation appear to be more cultural and historic than economic, since high rates are found in both rich and poorer countries. |
| 5 | Summary | There appears to be no conclusive link between national prosperity and the number of home owners. |

This example shows that:

- (a) A paragraph is a group of sentences that deal with a single topic. Dividing up the text into paragraphs helps both writer and reader to follow the argument more clearly.
- (b) The length of paragraphs varies significantly according to text type, but should normally be no less than four or five sentences.
- (c) Usually (but not always), the first sentence introduces the topic. Other sentences may give definitions, examples, extra information, reasons, restatements and summaries.
- (d) The parts of the paragraph are linked together by the phrases and conjunctions shown in bold. They guide the reader through the arguments presented.

► See [Unit 3.5](#) Conjunctions

3 Practice A

■ Read the next paragraph from the same essay and answer the questions below.

Despite this, many countries encourage the growth of home ownership. Ireland and Spain, for instance, allow mortgage payers to offset payments against income tax. It is widely believed that owning your own home has social as well as economic benefits. Compared to renters, home owners are thought to be more stable members of the community who contribute more to local affairs. In addition, neighbourhoods of owner occupiers are considered to have less crime and better schools. But above all, home ownership encourages saving and allows families to build wealth.

- (a) Analyse the paragraph by completing the left hand column in the table below with the following types of sentence: Supporting point 1, Supporting point 2, Supporting point 3, Example, Main reason, Topic.
- (b) Underline the words and phrases used to link the sentences together.
- (c) Which phrase is used to link this paragraph to the one before?

	Despite this, many countries encourage the growth of home ownership.
	Ireland and Spain, for instance, allow mortgage payers to offset payments against income tax.
	It is widely believed that owning your own home has social as well as economic benefits.
<i>Supporting point 1</i>	Compared to renters, home owners are thought to be more stable members of the community who contribute more to local affairs.
	In addition, neighbourhoods of owner occupiers are considered to have less crime and better schools.
	But above all, home ownership encourages saving and allows families to build wealth.

4 Development of ideas

- (a) The sentences below form the third paragraph of the same essay, but they have been mixed up. Use the table on p. 70 to put them in the correct order.
- (i) When this burst, millions of people lost their homes, which for many had contained their savings.
- (ii) These mortgages had been developed to allow higher-risk poorer families to buy their own homes, but this contributed to a property price bubble.
- (iii) Many economists now argue that there is a maximum level of home ownership which should not be exceeded.
- (iv) All these claims were challenged by the economic crash of 2008, which was largely caused by defaults on American sub-prime mortgages.
- (v) Even households that had positive equity still felt poorer and reduced their spending.
- (vi) Others were trapped in their houses by negative equity, in other words their houses were worth less than they had paid for them.

Topic sentence	<i>All these claims were challenged by the economic crash of 2008, which was largely caused by defaults on American sub-prime mortgages.</i>
Definition	
Result 1	
Result 2	
Result 3	
Conclusion	

- (b) Underline the phrase used to link the paragraph to the previous one.
- (c) Underline the words and phrases used to link the sentences together.

5 Introducing paragraphs and linking them together

In order to begin a new topic, you may use phrases such as:

Turning to the issue of . . .

Rates of infection must also be examined . . .

. . . is another area for consideration.

Paragraphs can also be introduced with adverbs:

Traditionally, few examples were . . .

Finally, the performance of . . .

Currently, there is little evidence of . . .

Originally, most families were . . .

In the example paragraphs above, each new paragraph begins with a phrase that links it to the previous paragraph, in order to maintain continuity of argument:

Despite this (i.e. the lack of a conclusive link)

All these claims (i.e. arguments in favour of home ownership)

6 Practice B

■ Use the information below to write a paragraph about Bill Gates.

- 1955 Bill Gates was born, the second child in a middle-class Seattle family
- 1968 At age 13, he became interested in writing computer programmes
- 1975 Gates and his school friend Allen started a programming business called Micro-Soft
- 1980 IBM asked Microsoft to write an operating system (called MS-DOS) for its new PC
- 1985 Microsoft launched Windows operating system
- 1995 Gates became the richest man in world
- 2006 He stepped down from working at Microsoft to focus on his charitable foundation

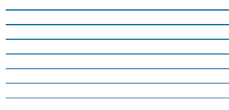
7 Practice C

■ Use the notes below to write two paragraphs on the subject of 'trams'. Use conjunctions to organise the paragraphs, and a suitable phrase to introduce and link the paragraphs together.

- Trams (streetcars in the USA) were first developed in the late nineteenth century
- They provided cheap and convenient mass transport in many cities
- Rail-based systems were expensive to maintain
- Fixed tracks meant that system was inflexible
- During the 1950s–1960s, many European and Asian cities closed tram systems
- Today, trams are becoming popular again
- Some cities (e.g. Paris and Manchester) are building new systems
- Trams are less polluting than cars and cheaper to operate
- Problems remain with construction costs and traffic congestion blocking tracks
- Expense of building modern tramways means that they remain controversial

UNIT
1.11

Introductions and Conclusions



An effective introduction explains the purpose and scope of the paper to the reader. The conclusion should provide a clear answer to any question asked in the title, as well as summarising the main points. In coursework, both introductions and conclusions are normally written after the main body.

1 Introduction contents

Introductions are usually no more than about 10 per cent of the total length of the assignment. Therefore, in a 2,000-word essay, the introduction would be about 200 words.

- (a) What is normally found in an essay introduction? Look at the list below, and choose the points you think might be included.

Components	Yes/No
(i) A definition of any unfamiliar terms in the title	
(ii) Your opinions on the subject of the essay	
(iii) Mention of some sources you have read on the topic	
(iv) A provocative idea or question to interest the reader	
(v) Your aim or purpose in writing	

Components	Yes/No
(vi) The method you adopt to answer the question (or an outline)	
(vii) Some brief background to the topic	
(viii) Any limitations you set yourself	

■ (b) Read the extracts below from introductions to articles and decide which of the components listed above (i-viii) they are examples of.

- (A) In the past 20 years, the ability of trial juries to assess complex or lengthy cases has been widely debated.
- (B) The rest of the paper is organised as follows. The second section explains why corporate governance is important for economic prosperity. The third section presents the model specification and describes the data and variables used in our empirical analysis. The fourth section reports and discusses the empirical results. The fifth section concludes.
- (C) The purpose of this paper is to investigate changes in the incidence of extreme warm and cold temperatures over the globe since 1870.
- (D) There is no clear empirical evidence sustaining a ‘managerial myopia’ argument. Pugh *et al.* (1992) find evidence that supports such a theory, but Meulbrook *et al.* (1990), Mahoney *et al.* (1997), Garvey and Hanka (1999) and a study by the Office of the Chief Economist of the Securities and Exchange Commission (1985) find no evidence.
- (E) ‘Social cohesion’ is usually defined in reference to common aims and objectives, social order, social solidarity and the sense of place attachment.
- (F) This study will focus on mergers in the media business between 1995 and 2010, since with more recent examples an accurate assessment of the consequences cannot yet be made.

2 Introduction structure

Not every introduction will include all the elements chosen above.

■ Decide which are essential and which are optional.

There is no standard pattern for an introduction, since much depends on the type of research you are conducting and the length of your work, but this is a common structure:

- (a) Definition of key terms, if needed
- (b) Relevant background information
- (c) Review of work by other writers on the topic
- (d) Purpose or aim of the paper
- (e) Your research methods
- (f) Any limitations you imposed
- (g) An outline of your paper

■ **Study the extracts below from the introduction to an essay titled ‘Evaluate the experience of e-learning for students in higher education’.**

- (a) Certain words or phrases in the title may need clarifying because they are not widely understood:

There is a range of definitions of this term, but in this paper ‘e-learning’ refers to any type of learning situation where content is delivered via the Internet.

► See **Unit 2.6 Definitions**

- (b) It is useful to remind the reader of the wider context of your work. This may also show the value of the study you have carried out:

Learning is one of the most vital components of the contemporary knowledge-based economy. With the development of computing power and technology, the Internet has become an essential medium for knowledge transfer.

- (c) While a longer article may have a separate literature review, in a shorter essay it is still important to show familiarity with researchers who have studied this topic previously. This may also reveal a gap in research that justifies your work:

Various researchers (Webb and Kirstin, 2003; Honig et al., 2006) have evaluated e-learning in a health care and business context, but little attention so far has been paid to the reactions of students in higher education to this method of teaching.

- (d) The aim of your research must be clearly stated so the reader knows what you are trying to do:

The purpose of this study was to examine students’ experience of e-learning in a higher education context.

- (e) The method demonstrates the process that you undertook to achieve the aim given before:

A range of studies was first reviewed, and then a survey of 200 students was conducted to assess their experience of e-learning.

- (f) You cannot deal with every aspect of this topic in an essay, so you must make clear the boundaries of your study:

Clearly, a study of this type is inevitably restricted by various constraints, notably the size of the student sample, and this was limited to students of Pharmacy and Agriculture.

- (g) Understanding the structure of your work will help the reader to follow your argument:

The paper is structured as follows. The first section presents an analysis of the relevant research, focusing on the current limited knowledge regarding the student experience. The second part presents the methodology of the survey and an analysis of the findings, and the final section considers the implications of the results for the delivery of e-learning programmes.

The complete introduction is as follows:

EVALUATE THE EXPERIENCE OF E-LEARNING FOR STUDENTS IN HIGHER EDUCATION

There is a range of definitions of this term, but in this paper 'e-learning' refers to any type of learning situation where content is delivered via the Internet. Learning is one of the most vital components of the contemporary knowledge-based economy. With the development of computing power and technology, the Internet has become an essential medium for knowledge transfer. Various researchers (Webb and Kirstin, 2003; Honig *et al.*, 2006) have evaluated e-learning in a health care and business context, but little attention so far has been paid to the reactions of students in higher education (HE) to this method of teaching. The purpose of this study was to examine students' experience of e-learning in an HE context.

A range of studies was first reviewed, and then a survey of 200 students was conducted to assess their experience of e-learning. Clearly, a study of this type is inevitably restricted by various constraints, notably the size of the student sample, and this was limited to students of Pharmacy and Agriculture. The paper is structured as follows. The first section presents an analysis of the relevant research, focusing on the current limited knowledge regarding the student experience. The second part presents the methodology of the survey and an analysis of the findings, and the final section considers the implications of the results for the delivery of e-learning programmes.

(225 words)

3 Opening sentences

It can be difficult to start writing an essay, but especially in exams, hesitation will waste valuable time. The first few sentences should be general but not vague, to help the reader focus on the topic. They often have the following pattern:

Time phrase	Topic	Development
Currently,	the control of water resources	has emerged as a potential cause of international friction.
Since 2008,	electric vehicles	have become a serious commercial proposition.

It is important to avoid opening sentences that are over general and vague.

Compare:

Nowadays, there is a lot of competition among different news providers. ✗

Newspapers are currently facing strong competition from rival news providers such as the Internet and television. ✓

■ Write introductory sentences for three of the following titles.

- (a) How important is it for companies to have women as senior managers?
- (b) Are there any technological solutions to global warming?
- (c) What can be done to reduce infant mortality in developing countries?
- (d) Compare the urbanisation process in two contrasting countries.

► See [Unit 2.8](#) Generalisations

4 Conclusions

Conclusions tend to be shorter and more varied in format than introductions. Some articles may have a ‘summary’ or ‘concluding remarks’. But student papers should generally have a final section that summarises the arguments and makes it clear to the reader that the original question has been answered.

■ (A) Which of the following are generally acceptable in conclusions?

- (a) A statement showing how your aim has been achieved.
- (b) A discussion of the implications of your research.

- (c) Some new information on the topic not mentioned before.
- (d) A short review of the main points of your study.
- (e) Some suggestions for further research.
- (f) The limitations of your study.
- (g) Comparison with the results of similar studies.
- (h) A quotation that appears to sum up your work.

■ **(B) Match the extracts from conclusions below with the acceptable components above. Example: (a) = (vi).**

- (i) As always, this investigation has a number of limitations to be considered in evaluating its findings.
- (ii) These results suggest that the risk of flooding on this coast has increased significantly and so further coastal development may be at risk.
- (iii) Another line of research worth pursuing further is to study the importance of language for successful expatriate assignments.
- (iv) Our review of 13 studies of strikes in public transport demonstrates that the effect of a strike on public transport ridership varies and may either be temporary or permanent.
- (v) These results of the Colombia study reported here are consistent with other similar studies conducted in other countries (Baron and Norman, 1992).
- (vi) This study has clearly illustrated the drawbacks to family ownership of retail businesses.

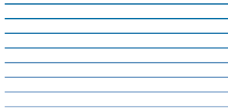
5 Practice

■ **The following sentences form the conclusion to the essay titled 'Evaluate the experience of e-learning for students in higher education', whose introduction was given above, but they have been mixed-up. Put them into a logical order (1-5).**

- (a) This finding was clear, despite the agreed convenience of e-learning.
- (b) Given the constraints of the small and limited sample, there is clearly room for further research in this field.
- (c) However, our survey of nearly 200 students found a strong preference for traditional classroom teaching.
- (d) But, in general, it would appear that e-learning is unlikely to be acceptable as a primary teaching method in higher education.
- (e) This study found that little relevant research on the HE student experience of e-learning has been conducted, and the research that has been reported indicates a mixed reaction to it.

UNIT
1.12

Rewriting and Proofreading



In exams, you have no time for rewriting, but for coursework it is important to take time to revise your work to improve its clarity and logical development. In both situations, proofreading is essential to avoid the small errors that may make parts of your work inaccurate or difficult to understand.

1 Rewriting

Although it is tempting to think that the first draft of an essay is good enough, it almost certainly can be improved. After completing your first draft, you should leave it for a day and then reread it, asking yourself the following questions:

- (a) Does this fully answer the question(s) in the title?
- (b) Do the different sections of the paper have the right weight (i.e. is it well balanced)?
- (c) Does the argument or discussion develop clearly and logically?
- (d) Have I forgotten any important points that would support the development?

2 Practice A

As part of a module on Qualitative Research Methods, you have written the first draft of a 1,000-word paper titled: 'What would be an acceptable number of interviews to carry out for a Master's dissertation?'

- Study the introduction to this paper below, and decide how it could be improved, listing your suggestions in the table.

An interview can be defined as a conversation with a definite structure and objective. It goes beyond an everyday discussion with no particular purpose. There are many possible interview situations, but all involve an interviewer and an interviewee. It is normal for the former to ask the latter direct questions, and record the answers. The questions may be prepared in advance or they may occur as the interview develops. The recording is often done on paper, but may also be done by audio or video recording. Interviews can take place anywhere, in a street, café, office, bar, restaurant, etc. It is hard to say how many interviews can be carried out in one day. I personally think that two is the maximum because it can get very tiring. A lot depends on the subject being researched.

	Suggestions for improvement
(a)	
(b)	
(c)	
(d)	
(e)	

Comments on the first draft might include some of the following:

- (a) Too much space given to basic points
- (b) No references are given
- (c) Sentences are too short
- (d) Style (e.g. I personally think) not suitable
- (e) Question in title not addressed

With these points in mind, the introduction could be re-written as follows:

Organising an interview involves a series of steps (Davies, 2007), including recruiting interviewees, finding a suitable venue and writing appropriate guidelines. However, depending on the research subject, a more flexible approach can be adopted, resulting in a less structured interview (Cooper and Schindler, 2008). For a Master's dissertation, interviews must contain data relevant to the research topic,

which the interviewer can later process. As King states: ‘gathering a large volume of cases does not guarantee the credibility of a study’ (King, 2004: 16). Most writers agree that two one-hour interviews per day are effectively the maximum for one interviewer, given the time needed for preparation and subsequent processing. Moreover, if audio or video recording is used, there is more content to be analysed, for instance in terms of facial expression. The analysis of one interview can take up to three days’ work. In order to answer the question, clearly much depends on the research topic and the time the researcher has available.

3 Practice B

- Read the next section on ‘Possible ethical issues raised by this kind of research’. Decide how it could be improved, and rewrite it in the box below.

Any organisation that allows researchers to interview its employees runs a big risk. The interviewees may complain about the boss or about other workers. Another danger for the researcher is that employees may feel obliged to give positive answers to questions instead of their honest opinions, because they are afraid of their bosses finding out what they really think. Also, the reputation of the organisation may suffer. I believe that researchers should make sure that this does not happen. They must make it clear why they are doing the research, and keep everyone’s name secret by using false names. If this is not done, there’s a good chance that the validity of the whole research project will be threatened.

4 Proofreading

Proofreading means checking your work for small errors that may make it more difficult for the reader to understand exactly what you want to say. If a sentence has only one error:

She has no enough interpersonal skills to handle different relationships . . .

it is not difficult to understand, but if there are multiple errors, even though they are all quite minor, the effect is very confusing:

A american senate once say: 'Truth is frist casualty off war.'

Clearly, you should aim to make your meaning as clear as possible. Note that computer spellcheckers do not always help you, since they may ignore a word that is spelt correctly but is not the word you meant to use:

Tow factors need to be considered . . .

5 Practice C

■ Examples of the most common types of error in student writing are shown below. In each case, underline the error and correct it.

- (i) **Factual:** corruption is a problem in many countries such as Africa
- (ii) **Word ending:** she was young and innocence
- (iii) **Punctuation:** What is the optimum size for a research team
- (iv) **Tense:** Since 2005 there were three major earthquakes in the region
- (v) **Vocabulary:** . . . vital to the successfulness of a company operating in China
- (vi) **Spelling:** pervious experience can sometimes give researchers . . .
- (vii) **Singular/plural:** one of the largest company in Asia
- (viii) **Style:** . . . finally, the essay will conclude with a conclusion
- (ix) **Missing word:** an idea established by David Ricardo in nineteenth century
- (x) **Word order:** a rule of marketing which states that consumers when go out shopping . . .

6 Practice D

■ The following extracts each contain one type of error. Match each to one of the examples (i–x) above, and correct the error.

- (i) Products like Tiger biscuits are well-known to kids . . .
- (ii) Both companies focus on mass marketing to promote its line of products.

- (iii) Failure to find the right coffee may lead to torment for consumers.
- (iv) . . . different researchers have differently effects on the research.
- (v) After the single European market was established in 1873 . . .
- (vi) . . . experienced researchers can most likely come over these problems.
- (vii) Firstly because, it provides them with an opportunity for borrowing capital . . .
- (viii) The company selected Budapest in Hungry for setting up its research centre.
- (ix) These cases demonstrate why companies from the rest of world are eager to . . .
- (x) From 2008 to 2012 there are few cases of cholera.

7 Practice E

- Underline the errors in the paragraph below and correct them.

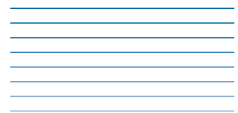
Bicycle is one of most efficient machine ever designed. Cyclists can travel for times faster than walkers; when using less enorgy to do so. Various people invented early versions of the bicycle, but the first modle with pedals which was successful mass-produced was make by a frenchman, Ernest Michaux, on 1861. Later aditions included pneumatic tyres and gears. Today hundreds of million of bicycles are in use over all world.



Elements of Writing

PART

2



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UNIT
2.1

Argument and Discussion

On most courses, it is not enough to show that you are familiar with the leading authorities. Students are expected to study the conflicting views on any topic and engage with them, which means analysing and critiquing them if appropriate. This unit demonstrates ways of showing your familiarity with both sides of an argument and presenting your own conclusions in a suitably academic manner.

1 Discussion vocabulary

Essay titles commonly ask students to ‘discuss’ a topic:

‘Children will learn a foreign language more easily if it is integrated with another subject – discuss.’

This requires an evaluation of both the benefits and disadvantages of the topic, with a section of the essay, sometimes headed ‘Discussion’, in which a summary of these is made. The following vocabulary can be used:

+	–
benefit	drawback
advantage	disadvantage
a positive aspect	a negative feature
pro (informal)	con (informal)
plus (informal)	minus (informal)
one major advantage is . . .	a serious drawback is . . .

One drawback to integrating content and language is the demand it places on the teacher.

A **significant benefit** of teaching a subject through a language is the increased motivation to master the language.

■ Fill the gaps in the following paragraph using language from the table above.

Every year, millions of students choose to study in a foreign country. This can have considerable (a) _____, such as the chance to experience another culture, but also involves certain (b) _____, which may include feelings of isolation or homesickness. Another (c) _____ aspect may be the high cost, involving both fees and living expenses. However, most students appear to find that the (d) _____ outweigh the (e) _____, and that the chance to join an international group of students is a major (f) _____ in developing a career.

2 Organisation

The discussion can be organised in two ways, either by grouping the benefits in one section and the disadvantages in another (vertical), or by examining the subject from different viewpoints (horizontal). For example, the following essay title can be discussed in two ways, as shown:

‘Prisons do little to reform criminals and their use should be limited – discuss.’

(a) Vertical

Drawbacks

Prisons are expensive, may be ‘universities of crime’, most prisoners reoffend after leaving, many prisoners have mental health problems that are untreated.

Benefits

Prisons isolate dangerous criminals from society, act as a deterrent to criminal activity, may provide education or treatment (e.g. for drug addiction), provide punishment for wrongdoing.

Discussion

Numbers of prisoners are rising in many countries, which suggests that the system is failing. Evidence that short sentences are of little value. But prisons will always be necessary for some violent criminals, and as a deterrent.

(b) Horizontal

Economic

High costs of keeping prisoners secure. Compare with other forms of punishment.

Ethical

Do prisons reform criminals? What rights should prisoners have? Cases of wrongful imprisonment.

Social

Effect on families of prisoners, especially female prisoners with children. But also necessary to consider the victims of crime, especially violent crime, and provide punishment for wrongdoing.

Discussion

Numbers of prisoners are rising in many countries, which suggests that the system is failing. Evidence that short sentences are of little value, while cost of prison system is rising. But prisons will always be necessary for some violent criminals, and as deterrent.

- What are the advantages of each format (i.e. vertical and horizontal)?

3 Practice A

You have to write an essay titled:

'Working from home can be positive for many companies and their employees – discuss.'

- Brainstorm the positive and negative aspects in the box below, and then write an outline using one of the structures (vertical or horizontal) on pp. 86–87.

+	-
<i>No time wasted commuting to work</i>	

'Working from home can be positive for many companies and their employees – discuss.'

4 The language of discussion

In discussion, avoid personal phrases such as *in my opinion* or *personally, I think . . .*

Use impersonal phrases instead, such as:

<i>It is generally accepted that</i>	<i>working from home saves commuting time</i>
<i>It is widely agreed that</i>	<i>email and the Internet reduce reliance on an office</i>
<i>Most people</i>	<i>appear to need face-to-face contact with colleagues</i>
<i>It is probable that</i>	<i>more companies will encourage working from home</i>
<i>The evidence suggests that</i>	<i>certain people are better at self-management</i>

These phrases suggest a minority viewpoint:

<i>It can be argued that</i>	<i>home-working encourages time-wasting</i>
<i>One view is that</i>	<i>home-workers become isolated</i>

When you are supporting your opinions with sources, use phrases such as:

<i>According to Emerson (2003)</i>	<i>few companies have developed clear policies</i>
<i>Poledna (2007) claims that</i>	<i>most employees benefit from flexible arrangements</i>

5 Counterarguments

Counterarguments are ideas that are opposite to your ideas. In an academic discussion, you must show that you are familiar with both sides of the argument, and provide reasons to support your position. It is usual to deal with the counterarguments first, before giving your view.

- What is the writer's position in the following example, on the topic of prisons, from (2) on p. 86?

It is claimed that prisons are needed to isolate dangerous criminals from society, and to provide punishment for wrongdoing. But while this may be true in a minority of cases, more commonly prisons act as 'universities of crime', which serve to reinforce criminal behaviour. The majority of prisoners are not dangerous, and could be dealt with more effectively by other means.

- Study the example opposite, and write two more sentences using ideas from the title in (3) on p. 87.

Counterargument	Your position
<i>Some people believe that home-workers become isolated,</i>	<i>but this can be avoided by holding weekly meetings for all departmental staff.</i>

6 Providing evidence

Normally, your conclusions on a topic follow an assessment of the evidence. You must show that you have studied the relevant sources, since only then can you give a balanced judgement.

- Study the following text, which discusses the idea that young people today, who have grown up with computing and the Internet, are different from previous generations. Then answer the following questions.

DO 'DIGITAL NATIVES' EXIST?

Various writers have argued that people born near the end of the twentieth century (1985–2000) and who have been using computers all their lives have different abilities and needs to other people. Palfrey and Gasser (2008) refer to them as the 'net generation' and argue that activities such as putting videos on You Tube are more natural for them than writing essays. Similarly, Prensky (2001a) claims that the educational system needs to be revised to cater for the preferences of these 'digital natives'.

But other researchers doubt that these claims can apply to a whole generation. Bennett, Maton and Kervin (2008) argue that these young people comprise a whole range of abilities, and that many of them only have a limited understanding of digital tools. They insist that the so-called 'digital native' theory is a myth, and that it would be a mistake to re-organise the educational system to cater for their supposed requirements.

Clearly there are some young people who are very proficient in online technologies, but taking a global perspective many still grow up and are educated in a traditional manner. Teaching methods are constantly being revised, but there is no clear evidence of a need to radically change them.

- (a) How many sources are cited to support the 'digital native' theory?
- (b) What do these writers suggest changing?
- (c) Why do their critics disagree with them?
- (d) What is the opinion of the writer of this text?
- (e) What is your opinion of this subject?

7 Practice B

- Write two paragraphs on the topic: 'Is the exploration of space worthwhile?' Use the ideas below and make your position clear.

Pros

- Scientists need to collect information to understand the universe
- Space engineering has produced many useful discoveries (e.g. satellite communication)
- Exploration promotes cooperation between nations (e.g. space station)

(Source: Donnet-Kammel, 2005)

Cons

- Huge amounts of money are spent with little result
- Resources should be spent on urgent needs on earth (e.g. disease control)
- National space programmes are testing potential weapons (e.g. missiles)

(Source: Soroka, 2000)

- See [Unit 2.10](#) Problems and Solutions



Discussion

UNIT 2.2

Cause and Effect

Academic work frequently involves demonstrating a link between a cause, such as a cold winter, and an effect or result, such as an increase in illness. This unit demonstrates and practises two methods of describing the link, with the focus either on the cause or on the effect.

1 The language of cause and effect

A writer may choose to emphasise either the cause or the effect. In both cases, either a verb or a conjunction can be used to show the link.

(a) Focus on causes

With verbs

<i>The heavy rain</i>	<i>caused</i>	<i>the flood</i>
	<i>led to</i>	
	<i>resulted in</i>	
	<i>produced</i>	

With conjunctions

<i>Because of</i>	<i>the heavy rain</i>	<i>there was a flood</i>
<i>Due to</i>		
<i>Owing to</i>		
<i>As a result of</i>		

(b) Focus on effects

With verbs (note use of passives)

The flood *was caused by* *the heavy rain*
 was produced by
 resulted from

With conjunctions

There was a flood *due to* *the heavy rain*
 because of
 as a result of

Compare the following:

<i>Because children were vaccinated, diseases declined</i>	(because + verb)
<i>Because of the vaccination, diseases declined</i>	(because of + noun)
<i>As/since children were vaccinated, diseases declined</i>	(conjunction + verb)
<i>Owing to/due to the vaccination, diseases declined</i>	(conjunction + noun)

Conjunctions are commonly used with specific situations, while verbs tend to be used in general cases:

Printing money commonly leads to inflation (general)
Due to July's hot weather, demand for ice cream increased (specific)

Note the position of the conjunctions in the following:

The teacher was ill, therefore/hence/so/consequently the class was cancelled

► See **Unit 3.5** Conjunctions

2 Practice A

- Match the causes with their likely effects and write sentences linking them together, deciding whether it is a specific or general situation.

Causes	Effects
Cold winter of 2007	stores closing on high street
Higher rates of literacy	more tourists arriving
Construction of the airport	a new government formed
Last year's national election	greater demand for secondary education
Installing speed cameras on main roads	increased demand for electricity
Opening a new hospital in 2012	a fall in the number of fatal accidents
More people shopping on the Internet	reduced infant mortality

- (a) *Owing to the cold winter of 2007, there was increased demand for electricity.*
- (b) _____
- (c) _____
- (d) _____
- (e) _____
- (f) _____
- (g) _____

3 Practice B

- Complete the following sentences with likely effects.

- (a) Increasing use of email for messages _____
- (b) The violent storms last week _____
- (c) The new vaccine for tuberculosis (TB) _____
- (d) Building a high-speed railway line _____
- (e) The invention of the jet engine _____

- Complete these sentences with possible causes.

- (f) The serious motorway accident _____
- (g) The 1914–1918 war _____
- (h) The increase in obesity _____
- (i) Earthquakes _____
- (j) The rising prison population _____

4 Practice C

- Use conjunctions or verbs to complete the following paragraph.

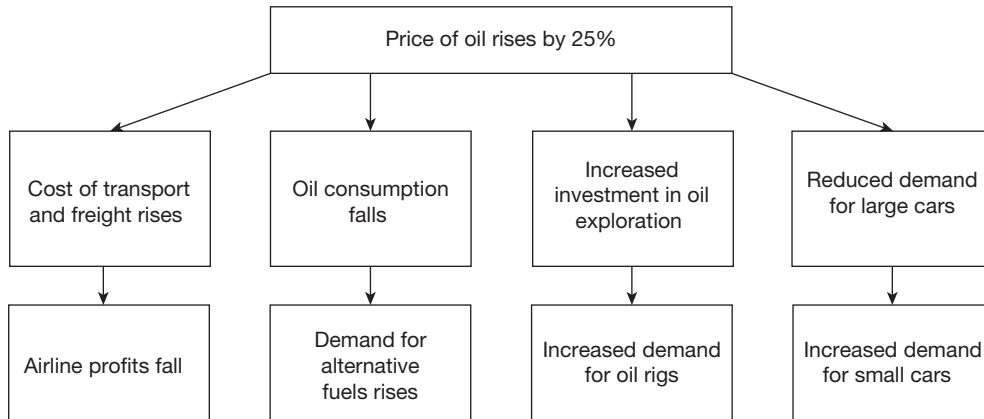
Why Women Live Longer

Some British scientists now believe that women live longer than men

- (a) _____ T cells, a vital part of the immune system that protects the body from diseases. Previously, various theories have attempted to explain longer female life expectancy. Biologists claimed that women lived longer (b) _____ they need to bring up children. Others argued that men take more risks, (c) _____ they die earlier. But a team from Imperial College think that the difference may be (d) _____ women having better immune systems. Having studied a group of men and women they found that the body produces fewer T cells as it gets older, (e) _____ the ageing process. However, they admit that this may not be the only factor, and (f) _____ another research project may be conducted.

5 Practice D

- Study the flow chart below, which shows some of the possible effects of a higher oil price. Complete the paragraph describing this sequence.



An increase of 25 per cent in the price of oil would have numerous results. First, it would lead to ...

- Imagine that the government in your country passed a law making cigarettes illegal. Draw a flow chart showing possible effects, and write a paragraph describing them.
- Choose a situation in your own subject. Draw a flow chart showing some probable effects, and write a paragraph to describe them.

UNIT 2.3

Cohesion



Cohesion means joining a text together with reference words (e.g. he, she, theirs, the former) and conjunctions (e.g. but, then) so that the whole text is clear and readable. This unit practises the use of reference words, while conjunctions are examined in [Unit 3.5](#).

1 Reference words

These are used to avoid repetition:

Leonardo da Vinci (1452–1519) was a fifteenth-century Italian genius who produced only a handful of **finished artworks**. However, **they** include **Mona Lisa** and The Last Supper, **the former** perhaps the most famous painting in the world. Although **he** is remembered mainly as an artist, **he** was also an innovative engineer, scientist and anatomist. **His designs** include tanks and flying machines, and although few of **these** were built in **his** lifetime, **he** is still remembered as the man who saw **their** possibility.

Here, the reference words function as follows:

Leonardo da Vinci	finished artworks	Mona Lisa	designs
He/His	they	the former	these/their

Examples of reference words and phrases:

Pronouns	he/she/it/they
Possessive pronouns	his/her/hers/its/their/theirs
Objective pronouns	her/him/them
Demonstrative pronouns	this/that/these/those
Other phrases	the former/the latter/the first/the second/the last

2 Practice A

- Read the following paragraph and complete the table.

BUSINESS SHORT LIFE

La Ferrera (2007) has researched the life cycle of new businesses. She found that they have an average life of only 4.7 years, and considers this is due to two main reasons; one economic and one social. The former appears to be a lack of capital, the latter a failure to carry out sufficient market research. La Ferrera considers that together these account for approximately 70 per cent of business failures.

Reference	Reference word/phrase
La Ferrera	<i>She</i>
new businesses	
average life of only 4.7 years	
one economic	
one social	
the former . . . the latter . . .	

3 Preventing confusion

To avoid confusing the reader, it is important to use reference words only when the reference is clear and unambiguous. For example:

Pablo Picasso moved to Paris in 1904 and worked with George Braque from 1908 to 1909. He became interested in the analysis of form, which led to cubism.

In this case, it is not clear which person (Picasso or Braque) ‘he’ refers to. So, to avoid this, write:

Pablo Picasso moved to Paris in 1904 and worked with George Braque from 1908 to 1909. Picasso became interested in the analysis of form, which led to cubism.

4 Practice B

- In the following paragraph, insert suitable reference words from the box below in the gaps (more words than gaps).

he × 3/his × 4/it/them/they/this/these

Famous For?

When Andy Warhol died at the age of 58 in 1987, few people guessed that (a) _____ would soon become one of the most valuable artists in the world. In 2007, total sales of (b) _____ work at auction reached \$428 million. When, a year later, (c) _____ painting 'Eight Elvises' sold for over \$100 million, (d) _____ was one of the highest prices ever paid for a work of art. In (e) _____ working life, (f) _____ made about 10,000 artworks, and dealers believe that (g) _____ will continue to be popular with collectors in the future. (h) _____ is because of Warhol's huge reputation as a super-cool trendsetter and innovator. (i) _____ is also remembered for (j) _____ remark: 'In the future everyone will be famous for 15 minutes', which seems to forecast today's celebrity culture.

5 Practice C

- Read the paragraph below and replace the words in bold with reference words.

Velcro

Velcro is a fabric fastener used with clothes and shoes. **Velcro** was invented by a Swiss engineer called George de Mestral. **Mestral's** idea was derived from studying the tiny hooks found on some plant seeds. **The tiny hooks** cling to animals and help disperse the seeds. Velcro has two sides, one of which is covered in small hooks and the other in loops. When **the hooks and loops** are pressed together, they form a strong bond.

Mestral spent eight years perfecting **Mestral's** invention, which **Mestral** called 'Velcro' from the French words 'velour' and 'crochet'. **The invention** was patented in 1955 and today over 60 million metres of Velcro are sold annually.

6 Practice D

- Use the following information to write a paragraph about the invention of nylon, paying careful attention to the use of reference words.

Nylon

Inventor:	Wallace Carothers
Company:	DuPont Corporation (USA)
Carothers' position:	Director of research centre
Carothers' background:	Chemistry student, specialising in polymers (molecules composed of long chains of atoms)
Properties:	Strong but fine synthetic fibre
Patented:	1935
Mass produced:	1939
Applications:	Stockings, toothbrushes, parachutes, fishing lines, surgical thread

UNIT 2.4

Comparisons

It is often necessary to make comparisons in academic writing. The comparison might be the subject of the essay, or might provide evidence for the argument. In all cases, it is important to explain clearly what is being compared and to make the comparison as accurate as possible. This unit deals with different forms of comparison and practises their use.

1 Comparison structures

- (a) Some studies are based on a comparison:

The purpose of this study is to compare Chinese and American consumers on their propensity to use self-service technology in a retail setting.

In other cases, a comparison provides useful context:

The first attempt to decode the human genome took 10 years; now, it can be done in less than a week.

- (b) The two basic comparative forms are:

(i) *France is **larger** than Switzerland.*

*The students were **happier** after the exam.*

(-er is added to one-syllable adjectives and two-syllable adjectives ending in -y, which changes into an 'i')

(ii) *Learning Chinese is **more difficult** than learning English.*

(more . . . is used with other adjectives of two or more syllables)

- (c) These comparisons can be modified by the use of adverbs such as *slightly*, *marginally*, *approximately*, *considerably*, *significantly* and *substantially*:

*France is **substantially larger** than Switzerland.*

*Switzerland is **slightly smaller** than Holland.*

*Winters in Poland are **significantly colder** than in Portugal.*

- (d) Similarity can be noted by the use of *as . . . as* or *the same as*:

*The population of France is **approximately the same as** the population of Britain.*

*Summers in Tokyo are **as wet as** in Singapore.*

This form can be used for quantitative comparison:

*Britain is **half as large as** France.*

(also *twice as large as . . .*, *ten times as fast as . . .*)

► See **Unit 3.6** Numbers

2 Practice A

- Study the table, which shows the price of quality residential property in various cities. Complete the following comparisons, and write two more.

€ per m ²	City
28,000	London
16,500	New York
16,200	Moscow
16,000	Paris
15,850	Tokyo
13,500	Rome
11,850	Singapore
11,000	Sydney

- (a) Residential property in London is twice as expensive _____ in Rome.
 (b) Property in Moscow is _____ cheaper than in New York.
 (c) Tokyo property is nearly as expensive as property in _____.

- (d) Singapore has significantly cheaper property _____ New York.
- (e) London is the _____ expensive of the eight cities, while Sydney is the cheapest.
- (f) _____
- (g) _____

3 Forms of comparison

■ Compare these three structures

Parisian property is more expensive than Roman. (property)

Property in Paris is more expensive than in Rome.

The price of property in Paris is higher than in Rome.

Note that high/low are used for comparing abstract ideas (e.g. rates):

*The birth rate was **higher** 20 years ago.*

more/less must be used with *than* + comparison:

*This module is **more difficult than** the last one.*

*Divorce is **less common in Turkey than** in Germany.*

4 Using superlatives (e.g. the largest/smallest)

When using superlatives, take care to define the group (e.g. 'the cheapest car' has no meaning):

*The **cheapest car** **in the Ford range/in the USA**.*

the most/the least are followed by an adjective:

*The **most interesting** example is Ireland . . .*

the most/the fewest are used in relation to numbers:

*The **fewest** students studied biogenetics. (i.e. the lowest number)*

5 Practice B

- #### ■ Study the table opposite, which shows the income of the top 10 clubs in European football. Then read the comparisons. Each sentence contains one error. Find and correct it.

Income of leading European football clubs 2012–2013

Club	Revenue (€ million)
Real Madrid	518
FC Barcelona	482
Bayern Munich	431
Manchester United	423
Paris Saint Germain	398
Manchester City	316
Chelsea	303
Arsenal	284
Juventus	272
AC Milan	263

- (a) Real Madrid was the richest football club.
- (b) Real Madrid's income was almost twice much as AC Milan's.
- (c) FC Barcelona earned marginally more than Manchester City.
- (d) Juventus had less revenue Arsenal.
- (e) Chelsea's income was slightly lower than Bayern Munich's.
- (f) Manchester United earned approximately same as Bayern Munich.

6 Practice C

- Study the table below and complete the gaps in the paragraph (one word per gap).

Marriage and divorce rates (per 1,000 population) (Source: UN)

Country	Marriage rate	Divorce rate
Egypt	10.6	1.5
United States	8.4	4.7
Iran	8.4	0.8
Turkey	8.3	0.6
Japan	6.2	1.9
Russia	5.2	2.9
Spain	5.2	0.8
United Kingdom	5.2	3.1
South Africa	4.0	0.9
Libya	3.9	0.3

The table (a) _____ marriage and divorce rates in a variety of countries. The marriage (b) _____ ranges from 10.6 per thousand in Egypt to 3.9 in Libya, while the rate of divorce (c) _____ even more, from 4.7 in the USA to only 0.3 in Libya. The marriage rate in America is the (d) _____ as in Iran, which has a (e) _____ higher rate (f) _____ Turkey's. In countries such as Iran, Turkey and Libya, only 10 per cent of marriages appear to end in divorce, but in Russia and the USA the number is (g) _____ half. It seems possible that the (h) _____ marriage rate in the USA may be partly due to second marriages.

7 Practice D

- Study the data below about London. Then use some of it to write a comparison with a city you know well.

Location:	on River Thames, not far from coast
History:	a town has been on this site for about 2,000 years
Status:	national capital
Population:	over 7 million
Employment:	government offices, banking, finance, retail, entertainment
Culture:	240 museums, 300 theatres
Public transport:	London had the world's first underground railway, 'The Tube'; this now has 275 stations on 12 lines; plus red double-decker buses
Climate:	cool wet winters, warm wet summers; summer average approximately 17° C
Housing:	mainly brick terraced houses, some modern flats
Tallest building:	The Shard (310 m)



Comparison

UNIT 2.5

Definite Articles



Students often find the rules for using articles ('a', 'an' and 'the') in English confusing. This unit focuses on the definite article, 'the', and provides guidelines, examples and practice.

1 Use of articles

Unless they are uncountable, all nouns need an article when used in the singular. The article can be either **a/an** or **the**. Compare:

(a) *Research is an important activity in universities.*

(b) *The research begun by Dr Mathews was continued by Professor Brankovic.*

(c) *An interesting piece of research was conducted among 200 patients in the clinic.*

In (a), research, which is usually uncountable, is being used in a general sense.

In (b), a specific piece of research is identified, started by Dr Mathews.

In (c), the research is mentioned for the first time, and the word 'piece' is used to 'count' the research.

► See [Unit 2.12.3](#) Singular or plural? Uncountable nouns

2 Using definite articles

The rules for using **the** (the definite article) are quite complex.

■ Decide why it is used, or not used, in the following examples.

- (a) The world's fastest animal is the cheetah.
- (b) The USA was founded in the eighteenth century.
- (c) The government increased taxation in the 1970s.
- (d) The French Revolution was partly caused by bad harvests.
- (e) The *New Scientist* is published every week.
- (f) The south is characterised by poverty and emigration.
- (g) Pablo Picasso, the Spanish artist, was born in Malaga.
- (h) The River Seine runs through the middle of Paris.
- (i) The United Nations was founded in 1945.
- (j) The euro was introduced in 2002.

In general, **the** is used with:

- (a) superlatives (*fastest*)
- (b) time periods (*eighteenth century*, *1970s*)
- (c) unique things (*government*, *world*)
- (d) specified things (*French Revolution*)
- (e) regular publications (*New Scientist*)
- (f) regions and rivers (*south*, *River Seine*)
- (g) very well-known people and things (*Spanish artist*)
- (h) institutions and bodies (*United Nations*)
- (i) positions (*middle*)
- (j) currencies (*euro*)

It is **not** used with:

- (a) things in general (*bad harvests*)
- (b) names of countries (except for the UK, the USA and a few others)
- (c) abstract nouns (e.g. *poverty*, *love*)
- (d) companies/things named after people/places (e.g. *Sainsbury's*, *Heathrow Airport*)

Note the alternate forms:

The deserts of Australia are expanding.

Australia's deserts are expanding.

3 Practice A

Students often have problems deciding if a noun phrase is specific or not. Compare:

Climate change is a serious threat for many people. (not specific)

The Russian climate is characterised by long cold winters. (specific)

- In the following sentences, decide if the words and phrases in bold are specific or not, and whether 'the' should be added.

Example:

____ **inflation** was a serious problem for ____ **Brazilian government**.

*Inflation was a serious problem for **the** Brazilian government.*

- (a) ____ **engineering** is the main industry in ____ **northern region**.
- (b) ____ **insurance firms** have made record profits in ____ **last decade**.
- (c) ____ **global warming** is partly caused by ____ **fossil fuels**.
- (d) ____ **mayor** has been arrested on suspicion of ____ **corruption**.
- (e) ____ **moons of Jupiter** were discovered in ____ **eighteenth century**.
- (f) ____ **tourism** is ____ **world's** biggest industry.
- (g) ____ **forests of Scandinavia** produce most of ____ **Britain's** paper.
- (h) ____ **Thai currency** is ____ **baht**.
- (i) ____ **computer crime** has grown by 200 per cent in ____ **last five years**.
- (j) ____ **main causes** of ____ **Industrial Revolution** are still debated.
- (k) Already, 3 per cent of ____ **working population** are employed in ____ **call centres**.
- (l) ____ **latest forecast** predicts ____ **warmer winters** in ____ next two **years**.
- (m) Research on ____ **energy saving** is being conducted in ____ **Physics Faculty**.
- (n) ____ **best definition** is often ____ **simplest**.

4 Practice B

Note the difference in meaning between:

A professor of French (one of several/many)

The professor of French (the only one)

- Complete the following text by inserting a/an/the (or nothing) in each gap. (Note that in some cases, more than one answer is possible.)

The Origins of @

Giorio Stabile, a professor of (a) _____ history at La Sapienza University in Rome, has demonstrated that (b) _____ @ sign, now used in email addresses, was actually invented 500 years ago. Professor Stabile has shown that (c) _____ @, now (d) _____ symbol of (e) _____ Internet, was first used by (f) _____ Italian merchants during (g) _____ sixteenth century.

He claims that it originally represented (h) _____ unit of volume, based on (i) _____ large jars used to carry liquids in (j) _____ ancient Mediterranean world. He has found (k) _____ first example of its use in (l) _____ letter written in 1546 by (m) _____ merchant from Florence. (n) _____ letter, which was sent to Rome, announces (o) _____ arrival in Spain of (p) _____ ships carrying gold from (q) _____ South America.

UNIT 2.6

Definitions

Definitions are usually found in introductions (see [Unit 1.11](#)). They are not needed in every case, but if the title includes an unfamiliar phrase, or if the writer wants to use a term in a special way, it is important to make clear to the reader exactly what is meant in this context. This unit presents ways of writing both simple and complex definitions.

1 Simple definitions

Basic definitions are formed by giving a category and the application:

Word	Category	Application
An agenda	is a set of issues	to be discussed in a meeting.
A Master's degree	is an academic award	for postgraduate students, given on successful completion of a dissertation.
A grant	is a sum of money	given for a specific purpose.
A seminar	is an academic class	meeting with a tutor for study.

- Complete the following definitions by inserting a suitable category word or phrase from the box (there are more words than gaps).

material	theory	behaviour	organisation	organs
instrument	process	period	grains	profession

- (a) A barometer is a scientific _____ designed to measure atmospheric pressure.
- (b) Kidneys are _____ that separate waste fluid from the blood.
- (c) A multinational company is a business _____ that operates in many countries.
- (d) Reinforced concrete is a building _____ consisting of cement, sand, aggregate and steel rods.
- (e) Bullying is a pattern of antisocial _____ found in many schools.
- (f) Recycling is a _____ in which materials are used again.
- (g) A recession is a _____ of reduced economic activity.
- (h) Cereals are _____ widely grown for food production.

- Write definitions for the following:

- (i) A lecture is _____.
- (j) Tuberculosis (TB) is _____.
- (k) The Red Cross is _____.
- (l) An idiom is _____.

- Write two definitions from your own subject area:

2 Complex definitions

- Study the following examples and underline the terms being defined.

- (a) The definition for a failed project ranges from abandoned projects to projects that do not meet their full potential or simply have schedule overrun problems.

- (b) Development is a socio-economic-technological process having the main objective of raising the standards of living of the people.
- (c) Bowlby (1982) suggested that attachment is an organised system whose goal is to make individuals feel safe and secure.
- (d) . . . the non-linear effect called 'self-brightening' in which large-amplitude waves decay more slowly than small-amplitude ones . . .
- (e) Globalisation, in an economic sense, describes the opening up of national economies to global markets and global capital, the freer movement and diffusion of goods, services, finance, people, knowledge and technology around the world.

These examples illustrate the variety of methods used in giving definitions.

■ Which of the above example(s):

- (i) quotes a definition from another writer?
- (ii) gives a variety of relevant situations?
- (iii) explains a process?
- (iv) uses category words?

3 Practice

When writing introductions, it is often useful to define a term in the title, even if it is fairly common, in order to demonstrate your understanding of its meaning.

Example:

Title: Higher education should be free and open to all – discuss.

Definition: Higher education usually means university-level study for first or higher degrees, normally at the age of 18 or above.

■ Study the following titles, underline the terms that are worth defining, and write definitions for three of them.

- (a) Capital punishment has no place in the modern legal system – discuss.
- (b) How can the management of an entrepreneurial business retain its entrepreneurial culture as it matures?
- (c) E-books are likely to replace printed books in the next 20 years. Do you agree?
- (d) As urban areas continue to expand worldwide, will agriculture be able to feed the growing population of cities?
- (e) Given the medical dangers of obesity, what is the best way of reducing its incidence?

UNIT 2.7

Examples



Examples are used in academic writing for support and illustration. Suitable examples can strengthen the argument, and they can also help the reader to understand a point. This unit demonstrates the different ways in which examples can be introduced, and practises their use.

1 Using examples

Generalisations are commonly used to introduce a topic:

Many plants and animals are threatened by global warming.

But if the reader is given an example for illustration, the idea becomes more concrete:

Many plants and animals are threatened by global warming. Polar bears, for example, are suffering from the lack of Arctic ice.

Without examples, writing can seem too theoretical:

The overuse of antibiotics has had serious negative consequences.

But an example makes the idea easier to understand:

The overuse of antibiotics has had serious negative consequences. Hospital – acquired infections such as MRSA have become more difficult to treat and this has resulted in many deaths.

The example may also support the point the writer is making:

A participatory public has been a defining feature of American politics and historically a strength of the political system. Alexis de Tocqueville's classic treatise on 'Democracy in America' (1835) stressed the participatory tendencies of Americans in contrast to European publics.

► See **Unit 2.8** Generalisations

2 Phrases to introduce examples

- (a) **for instance, for example** (with commas)

Some car manufacturers, for instance Kia, now offer seven-year guarantees.

- (b) **such as, e.g.**

Many successful businessmen such as Bill Gates have no formal qualifications.

- (c) **particularly, especially** (to give a focus)

Certain Master's courses, especially American ones, take two years.

- (d) **a case in point** (for single examples)

A few diseases have been successfully eradicated. A case in point is smallpox.

- Add a suitable example to each sentence and introduce it with one of the phrases above.

Example:

A number of sports have become very profitable due to the sale of television rights.

A number of sports, **for instance motor racing**, have become very profitable due to the sale of television rights.

- (a) Some twentieth-century inventions affected the lives of most people.
- (b) Lately many countries have introduced fees for university courses.
- (c) Various companies have built their reputation on the strength of one product.
- (d) In recent years, more women have become political leaders.
- (e) Certain countries are frequently affected by earthquakes.
- (f) Many musical instruments use strings to make music.
- (g) Ship canals facilitate world trade.
- (h) Politicians have discussed a range of possible alternative punishments to prison.

3 Practice A

- Study the following text and add examples from the box, where suitable, using an introductory phrase from (2) on p. 113.

free delivery or discounted prices bookshops
clothing and footwear books and music
many supermarkets offer delivery services for online customers

THE CHANGING FACE OF SHOPPING

Widespread use of the internet has led to a major change in shopping habits. It is no longer necessary to visit shops to make routine purchases. With more specialised items internet retailers can offer a wider range of products than bricks-and-mortar shops. They can also provide extra incentives to customers, in addition to the convenience of not having to visit a real shop. As a result certain types of store are disappearing from the high street. Other products however, appear to require personal inspection and approval, and in addition many people enjoy the activity of shopping, so it seems unlikely that the internet will completely replace the shopping centre.

4 Practice B

- Read the text below and then insert suitable examples, where needed, to illustrate the points.

A NEW PERSPECTIVE?

Students who go to study abroad often experience a type of culture shock when they arrive in the new country. Customs that they took for granted in their own society may not be followed in the host country. Even everyday patterns of life may be different. When these are added to the inevitable differences which occur in every country students may at first feel confused. They may experience rapid changes of mood, or even want to return home. However, most soon make new friends and, in a relatively short period, are able to adjust to their new environment. They may even find that they prefer some aspects of their new surroundings, and forget that they are not at home for a while!

5 Restatement

Another small group of phrases is used when there is only one ‘example’. (Brackets may also be used for this purpose.) This is a kind of restatement to clarify the meaning:

The world’s leading gold producer, namely South Africa, has been faced with a number of technical difficulties.

in other words namely that is (to say) i.e. viz. (very formal)

- Add a suitable phrase from the box below to the following sentences, to make them clearer.

- (a) The company’s overheads doubled last year.
- (b) The Roman Empire was a period of autocratic rule.
- (c) The Indian capital has a thriving commercial centre.
- (d) Survival rates for the most common type of cancer are improving.
- (e) Participation rates in most democracies are in decline.

that is to say fewer people are voting
 in other words the fixed costs
 namely New Delhi
 (27 BC–476 AD)
 (i.e. breast cancer)

UNIT 2.8

Generalisations

Generalisations are often used to introduce a topic. They can be powerful statements because they are simple and easy to understand. But they must be used with care, to avoid being inaccurate or too simplistic. This unit explains how to generalise clearly and effectively.

1 Using generalisations

- (a) Generalisations are often used to give a simple introduction to a topic. Compare:

The majority of smokers in Britain are women.

with

Of all UK smokers, 56.2 per cent are women and 43.8 per cent are men.

Although the second sentence is more accurate, the first is easier to understand and remember. The writer must decide when accuracy is necessary, and when a generalisation will be acceptable.

- (b) You must avoid using generalisations that cannot be supported by evidence or research (e.g. *Students tend to be lazy*).

■ Decide which of the following are valid generalisations:

- (a) Cats are more intelligent than dogs.
- (b) Earthquakes are difficult to predict.
- (c) There is a link between poverty and disease.
- (d) Women work harder than men.
- (e) Travel by air is faster than train travel.

2 Structure

Generalisations can be made in two ways:

- (a) Most commonly using the plural:

Computers have transformed the way we live.

- (b) Using the singular + definite article (more formal):

The computer has transformed the way we live.

Avoid absolute phrases in generalisations such as:

Young children learn second languages easily.

Smoking causes lung cancer.

Such statements are dangerous because there may well be exceptions. Instead, it is better to use cautious phrases such as:

Young children tend to learn second languages easily.

Smoking can cause lung cancer.

► See [Unit 2.13.6](#) Style: Caution

3 Practice A

■ Write generalisations on the following topics:

Example: fresh fruit/health

Eating fresh fruit is important for health.

- | | |
|---------------------------------------|-------|
| (a) regular rainfall/good crop yields | _____ |
| (b) honest judges/respect for the law | _____ |
| (c) adequate sleep/academic success | _____ |
| (d) industrial growth/pollution | _____ |
| (e) cold weather/demand for gas | _____ |
| (f) job satisfaction/interesting work | _____ |

4 Practice B

- Study the table below and write five generalisations using the information.

Results of a college survey on where students prefer to study

	Undergraduates (%)		Graduates (%)	
	Male	Female	Male	Female
Library	20	17	47	32
Own room in silence	21	27	26	38
Own room with music	25	13	12	14
Own room in bed	15	24	6	10
Outdoors	6	9	4	2
Other	13	10	5	4

(Source: Author)

- (a) _____

- (b) _____

- (c) _____

- (d) _____

- (e) _____

5 Building on generalisations

- Read the following text and note the generalisations in italics. Answer the questions that follow.

WHAT WOMEN WANT

What we look for in choosing a mate seems to vary from place to place. A recent study (Jones and DeBruine, 2010) explores the idea that female preferences in a mate might vary according to the society in which she lives. In their research nearly 5,000 women in 30 countries were shown the same pictures of male faces and asked to state which they found more attractive. In countries where disease is common women chose men with more masculine features, while in countries such as America with more advanced health care and lower levels of disease, more effeminate-looking men were preferred. The researchers conclude that in healthier societies women are more interested in men who may form long-term relationships and help with child-rearing, while in places where child mortality rates are high they choose strongly-featured men who seem more likely to produce healthy children.

- What is the function of the first generalisation?
- What is the basis of the concluding generalisations?
- What is the purpose of the concluding generalisations?

6 Practice C

Most essays move from the general to the specific, as a generalisation has to be supported and developed. For example, an essay with the title ‘The impact of globalisation on the Chinese economy’ might develop in this way:

Generalisation	Support	Development > Specific
Since the mid-twentieth century, there has been a remarkable increase in international trade.	The reasons for this are a combination of international agreements such as GATT, better transport and improved communications.	China has played a significant part in this process, with its international trade growing by 16 times in just 20 years, while its GDP increased by nearly 10 per cent per year.

- Choose a title from the list below, or select one from your own subject, then write a generalisation and develop it in the same way.

- (a) Does tourism always have a negative effect on the host country?
- (b) Should governments use taxation to promote public health?
- (c) Is it more important to protect forests or to grow food?
- (d) Is it better for the state to spend money on primary or university education?

Generalisation	Support	Development > Specific

- See [Unit 1.11](#) Introductions and Conclusions

UNIT 2.9

Passives

The passive form is a feature of much academic writing, making it more impersonal and formal, but the passive should not be overused. This unit provides practice in developing a balanced style.

1 Active and passive

The passive is used when the writer wants to focus on the result, not on the cause:

The college was founded in 1925 by Walter Trimble. (passive)

Walter Trimble founded the college in 1925. (active)

In the first sentence, the emphasis is on the college, in the second on Trimble. So the passive is often used in written English when the cause (a person or thing) is less important or unknown.

Aluminium was first produced in the nineteenth century. (by someone)

The colony was abandoned in the 1630s. (due to something)

The cause of the action can be shown by adding ‘by . . .’:

The city was flooded by a severe hurricane.

The passive is also used in written work to provide a more impersonal style:

The findings were evaluated. (not ‘I evaluated the findings’)

► See **Unit 2.13** Style

2 Structure

All passive structures have two parts:

Form of the verb to be	Past participle
is	constructed
was	developed
will be	reorganised

■ Change the following into the passive.

- (a) We collected the data and compared the two groups.
- (b) I interviewed 120 people in three social classes.
- (c) They checked the results and found several errors.
- (d) We will make an analysis of the findings.
- (e) He asked four doctors to give their opinions.
- (f) She wrote the report and distributed ten copies.

3 Using adverbs

An adverb can be inserted in a passive form to add information:

*This process is **commonly** called 'networking'.*

■ Change the following sentences from active to passive and insert a suitable adverb from the box below. Decide if it is necessary to show a cause.

optimistically helpfully punctually accurately eventually carefully profitably

Example: The recession forced half the companies to go out of business.

*Half the companies were **eventually** forced to go out of business by the recession.*

- (a) The Connors family ran the company until 1981.
- (b) Dr Weber has predicted that prisons will be unnecessary in the future.

- (c) They provided pencils for all students in the exam.
- (d) The researchers calculated the percentages to three decimal places.
- (e) The students handed in the essays on Tuesday morning.
- (f) She researched the life cycle of over 15 types of mice.

4 Practice A

In most texts, the active and the passive are mixed.

- Read the following and underline the passive forms.

BOOTS

When John Boot died at 45, he was worn out by the effort of establishing his herbal medicine business. He had spent his early years as a farm labourer but had worked his way up to be the owner of a substantial business. He was born in 1815, became a member of a Methodist chapel in Nottingham, and later moved to the town. John was concerned by the situation of the poor, who could not afford a doctor, and in 1849 he opened a herbal medicine shop which was called the British and American Botanic Establishment. In the early stages John was helped financially by his father in law, while his mother provided herbal knowledge.

On his death in 1860 the business was taken over by his wife, and she was soon assisted by their 10-year-old son, Jesse. He quickly showed the business ability that transformed his father's shop into a national business. Jesse opened more shops in poor districts and pioneered advertising methods. He also insisted on doing business in cash, rather than offering his customers credit.

5 Practice B

- List the passives from the text above in the table below. Decide if the active could be used instead, and rewrite it if so.

Passive	Active possible?	Active
<i>He was worn out</i>	<i>Yes</i>	<i>The effort ... had worn him out</i>

Passive	Active possible?	Active

- What would be the effect of using the passive throughout the text?

6 Practice C

The passive is used more in written than in spoken English, but should not be overused, as it can give a very formal tone.

- In the following text, which continues the history of the Boots company, passives are used throughout. Change some of them into the active.

In 1889 he was introduced to Florence Rowe, the daughter of a bookseller, while on holiday, and they became engaged. After they were married the business was affected by her ideas: the product range was enlarged to include stationery and books. The Boots subscription library and in-store cafes were also introduced due to Florence's influence. During the First World War the Boots factories were used to make a variety of products, from sterilizers to gas masks. But after the war Jesse was attacked by arthritis and, worried by the economic prospects, the company was sold to an American rival for £2m. This, however, was made bankrupt during the Depression and Boots was then bought by a British group for £6m, and Jesse's son, John, was made chairman. The famous No.7 cosmetics range was launched in the 1930s and in the Second World War both saccharin and penicillin were produced in the factories. However, recently the company has been threatened by intense competition from supermarkets in its core pharmaceutical business.

UNIT 2.10

Problems and Solutions

Writing tasks frequently ask students to examine a problem and evaluate a range of solutions. This unit explains ways in which this kind of text can be organised. Note that some of the language is similar to that practised in [Unit 2.1](#) Argument and Discussion.

1 Paragraph structure

- Study the organisation of the following paragraph.

How Can Road Congestion be Reduced?

Currently, roads are often congested, which is expensive in terms of delays to the movement of people and freight. It is commonly suggested that building more roads, or widening existing ones, would ease the traffic jams. But not only is the cost of such work high, but the construction process adds to the congestion, while the resulting extra road space may encourage extra traffic. Therefore, constructing more roads is unlikely to solve the problem, and other remedies, such as road pricing or greater use of public transport, should be examined.

Problem: Currently, roads are often congested, which is expensive in terms of delays to the movement of people and freight.

Solution A: It is commonly suggested that building more roads, or widening existing ones, would ease the traffic jams.

Arguments against Solution A: But not only is the cost of such work high, but the construction process adds to the congestion, while the resulting extra road space may encourage extra traffic.

Conclusions in favour of Solutions B and C: . . . other remedies, such as road pricing or greater use of public transport, should be examined.

2 Alternative structure

The same ideas could be reordered to arrive at a different conclusion:

How Can Road Congestion be Reduced?

Currently, roads are often congested, which is expensive in terms of delays to the movement of people and freight. It is commonly suggested that building more roads, or widening existing ones, would ease the traffic jams. This remedy is criticised for being expensive and liable to lead to more road use, which may be partly true, yet the alternatives are equally problematic. Road pricing has many practical difficulties, while people are reluctant to use public transport. There is little alternative to a road building programme except increasing road chaos.

Problem: Currently, roads are often congested, which is expensive in terms of delays to the movement of people and freight.

Solution A: It is commonly suggested that building more roads, or widening existing ones, would ease the traffic jams.

Arguments against Solution A: This remedy is criticised for being expensive and liable to lead to more road use, which may be partly true . . .

Solutions B and C, and arguments against: . . . yet the alternatives are equally problematic. Road pricing has many practical difficulties, while people are reluctant to use public transport.

Conclusion in favour of Solution A: There is little alternative to a road building programme except increasing road chaos.

3 Practice A

- Analyse the following paragraph in a similar way.

Controlling Carbon Emissions

There is general agreement that rising levels of carbon dioxide (CO₂) in the earth's atmosphere, caused by burning fossil fuels, are contributing to global warming. It is argued that this trend can be reversed by generating energy from renewable sources, such as wind-power or solar. However, these sources tend to be unreliable and are often more expensive than using oil or coal. An alternative approach is to increase energy efficiency, for example by insulating homes better, so that demand for energy is reduced. Since this method is often quite cost-efficient it may prove to be more effective.

Problem: _____

Solution A: _____

Argument against Solution A: _____

Solution B: _____

Conclusion in favour of Solution B: _____

- Rewrite the paragraph using your own ideas to reach your own conclusion.

4 Vocabulary

The following words can be used as synonyms for *problem* and *solution*.

three main difficulties have arisen . . .	the best remedy for this may be . . .
the main challenge faced by nurses . . .	two answers have been put forward . . .
one of the concerns during the recession . . .	another suggestion is . . .
the new process created two questions . . .	Matheson's proposal was finally accepted.
the team faced six issues . . .	this was rectified/solved by . . .
our principal worry/dilemma was . . .	

5 Practice B

- Use the following points to build an argument in one paragraph.

Topic: University expansion

Problem: Demand for university places is growing, leading to overcrowding in lectures and seminars

Solution A: Increase fees to reduce demand

Argument against A: Unfair to poorer students

Solution B: Government pays to expand universities

Argument against B: Unfair to average taxpayer who would be subsidising the education of a minority who will earn high salaries

Conclusion: Government should subsidise poorer students

6 Practice C

- Think of a similar problem in your subject area. Complete the table and write a paragraph that leads to a conclusion.

Topic: _____

Problem: _____

Solution A: _____

Argument against A: _____

Solution B: _____

Argument for/against B: _____

(Solution C): _____

Conclusion: _____



Problems and Solutions

UNIT 2.11

Punctuation

Accurate punctuation and use of capital letters help the reader to understand exactly what the writer meant. While some aspects of punctuation, such as the use of commas, can be a matter of individual style, correct punctuation in areas such as a quotation is vital.

1 Capital letters

It is difficult to give precise rules about the use of capital letters in modern English, where there is a trend to use them less. However, they should always be used in the following cases:

- | | |
|-----------------------------------|--|
| (a) The first word in a sentence | <i>In the beginning . . .</i> |
| (b) Days and months | <i>Friday 21 July</i> |
| (c) Nationality words | <i>France and the French</i> |
| (d) Names of people/places | <i>Dr Martin Lee from Sydney</i> |
| (e) Book titles (main words only) | <i>Power and the State</i> |
| (f) Academic subjects | <i>She studied Biology and Mathematics</i> |
| (g) Names of organisations | <i>Sheffield Hallam University</i> |

2 Apostrophes (')

These are one of the most confusing features of English punctuation. They are mainly used in two situations:

- | | |
|--------------------------|---|
| (a) to show contractions | <i>He's the leading authority on Hegel.</i> |
|--------------------------|---|

NB: contractions are not common in academic English.

- (b) with possessives *The professor's secretary* (singular)
 Students' marks (plural words ending in 's')
 Women's rights (for irregular plurals)

NB: **It's** is the contraction of **it is** *It's possible the course will be cancelled.*

The possessive form is **its** *Civilization and its Discontents* (Freud)

3 Semicolons (;)

Semicolons are used to show the link between two connected phrases, when a comma would be too weak and a full stop too strong:

Twenty people were interviewed for the first study; thirty-three for the second.

Nobody questioned the results; they were quite conclusive.

Semicolons are also used to divide up items in a list when they have a complex structure, as in a multiple citation:

(Maitland, 2006; Rosenor, 1997; New Scientist, 2006b; University of Michigan, 2000).

4 Colons (:)

- (a) to introduce explanations *The meeting was postponed: the Dean was ill.*
(b) to start a list *Three aspects were identified: financial, social and ethical.*
(c) to introduce a quotation *As the Duchess of Windsor said: 'You can never be too rich or too thin.'*

5 Commas (,)

These are one of the commonest punctuation marks, but also the hardest to provide guidance for. Comma use is partly a matter of individual style. It is useful to think of commas as providing a brief pause for readers, to give them a chance to make sense of a chunk of text. Overuse can slow down the reader, but equally a lack of commas can be confusing.

Some instances of comma usage are:

- (a) after introductory words or phrases:

However, more cases should be considered before reaching a conclusion.

- (b) around examples or comments:

Certain crops, for instance wheat, are susceptible to diseases.

Nationalism, it is widely recognised, has a positive and negative side.

(c) with conjunctions:

Three hundred people were interviewed, but only half the responses could be used.

(d) in lists:

Tomatoes, beans, cabbages and potatoes were all genetically modified in turn.

6 Quotation marks/inverted commas (“...”/‘...’)

(a) Single quotation marks are used to emphasise a word:

The word ‘factory’ was first used in the seventeenth century.

The Swedish ‘third way’ or the welfare state . . .

to give quotations from other writers:

Goodwin’s (1977) analysis of habit indicates that, in general, ‘It will be more difficult to reverse a trend than to accentuate it.’

to show direct speech:

‘Can anyone find the answer?’ asked the lecturer.

Longer quotations are usually indented (i.e. have a wider margin) and/or are set in smaller type.

(b) Double quotation marks are used to show quotations inside quotations (nested quotations):

As Kauffman remarked: ‘his concept of “internal space” requires close analysis’.

NB: American English uses double quotation marks to show standard quotations.

(c) In references, quotation marks are used for the names of articles and chapters, but book or journal titles normally use italics:

Russell, T. (1995) ‘A future for coffee?’ *Journal of Applied Marketing* 6: 14–17.

► See [Unit 1.8](#) References and Quotations

7 Full stops (.)

These are used to show the end of a sentence:

The first chapter provides a clear introduction to the topic.

They are also used with certain abbreviations, when they are the [first part](#) of a word:

govt./Jan./p. 397

But do not use full stops with acronyms such as:

BBC/UN/VIP

► See **Unit 3.2 Abbreviations**

8 Others

Hyphens (-) are used with certain words, such as compound nouns, and certain structures:

A well-researched, thought-provoking book.

Her three-year-old daughter is learning to read.

Exclamation marks (!) and question marks (?):

‘Well!’ he shouted, ‘who would believe it?’

Brackets or parentheses () can be used to give additional detail, without interfering with the flow of the main idea:

Relatively few people (10–15 per cent) were literate in sixteenth-century Russia.

9 Practice A

■ Punctuate the following sentences.

- (a) the study was carried out by christine zhen-wei qiang of the national university of singapore
- (b) professor rowans new book the end of privacy 2014 is published in new york
- (c) as keynes said its better to be roughly right than precisely wrong
- (d) three departments law business and economics have had their funding cut
- (e) as cammack points out latin america is creating a new phenomenon democracy without citizens
- (f) thousands of new words such as app enter the english language each year
- (g) the bbcs world service is broadcast in 33 languages including somali and vietnamese
- (h) she scored 56 per cent on the main course the previous semester she had achieved 67 per cent

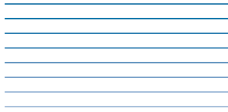
10 Practice B

- Punctuate the following text.

the school of biomedical sciences at borchester university is offering two undergraduate degree courses in neuroscience this year students can study either neuroscience with pharmacology or neuroscience with biochemistry there is also a masters course which runs for four years and involves a period of study abroad during november and december professor andreas fischer is course leader for neuroscience and enquiries should be sent to him via the website

UNIT
2.12

Singular or Plural?



The choice of singular or plural can be confusing in various situations, such as in the use of countable and uncountable nouns. This unit illustrates the main areas of difficulty and provides practice with these.

1 Five areas of difficulty

The main problem areas for international students are shown below.

- (a) Nouns should agree with verbs, and pronouns with nouns:

*Those **problems** are **unique***

*There **are** many **arguments** in favour*

- (b) Uncountable nouns and irregular plurals usually have no final 's':

*Most **students** receive free **tuition***

*The main export is tropical **fruit***

- (c) General statements normally use the plural:

*State **universities** have lower **fees***

- (d) 'Each'/'every' are followed by singular noun and verb forms:

*Every **student** **gets** financial support*

- (e) Two linked nouns should agree:

*Both the **similarities** and **differences** are important*

- Find the mistake in each of the following sentences and decide what type (a–e on p. 134) it is.

- (a) The proposal has both advantages and disadvantage.
- (b) A majority of children in Thailand is vaccinated against measles.
- (c) There are few young people in rural area.
- (d) Many places are experiencing an increase in crimes.
- (e) Each companies have their own policies.

2 Group phrases

singular + plural	plural + singular	plural + uncountable
half the universities	two types of institution	three areas of enquiry
a range of businesses	various kinds of course	several fields of research
one of the elements	many varieties of response	different rates of progress

- Study the following ‘group’ phrases.

Note that if a verb has more than one subject it must be plural, even if the preceding noun is singular:

Scores of students, some teachers and the president are at the meeting

Their valuable suggestions and hard work were vital

Certain ‘group’ nouns (e.g. team/army/government) can be followed by either a singular or plural verb:

The team was defeated three times last month (collectively)

The team were travelling by train and bus (separately)

3 Uncountable nouns

- (a) Most nouns in English are countable, but the following are generally uncountable (i.e. they are not usually used with numbers or the plural ‘s’).

accommodation

data

information

advice

education

knowledge

behaviour

equipment

money

commerce

furniture

news

<i>permission</i>	<i>scenery</i>	<i>trouble</i>
<i>progress</i>	<i>staff</i>	<i>vocabulary</i>
<i>research</i>	<i>traffic</i>	<i>weather</i>
<i>rubbish</i>	<i>travel</i>	<i>work</i>

Many of these can be ‘counted’ by using an extra noun:

*A **piece** of advice*

*Three **patterns** of behaviour*

*An **item** of equipment*

*Six **members** of staff*

- (b) Another group of uncountable nouns is used for materials:

wood/rubber/iron/coffee/paper/water/oil/stone

*Little **wood** is used in the construction of motor vehicles.*

*Huge amounts of **paper** are needed to produce these magazines.*

Many of these nouns can be used as countable nouns with a rather different meaning:

*Over twenty daily **papers** are published in Delhi.*

*Most **woods** are home to a wide variety of birds.*

- (c) The most difficult group can be used either as countable or uncountable nouns, often with quite different meanings (further examples: business/capital/experience):

*She developed **an interest** in genetics. (countable)*

*The bank is paying 4 per cent **interest**. (uncountable)*

Other nouns with a similar pattern are used for general concepts (e.g. love/fear/hope):

*Most people feel that **life** is too short. (uncountable – in general)*

*Nearly twenty **lives** were lost in the mining accident. (countable – in particular)*

4 Practice A

- Choose the correct alternative in these sentences.

- (a) Little/few news about the accident was released.
(b) He established three successful businesses/business in 2011.
(c) Substantial experiences/experience of report writing are/is required.

- (d) It is often claimed that travel broadens/travels broaden the mind.
- (e) Paper was/papers were very expensive in the twelfth century.
- (f) How much advice/many advices were they given before coming to Australia?
- (g) She had little interest/few interests outside her work.
- (h) The insurance policy excludes the effects of civil war/wars.
- (i) Irons were/iron was first powered by electricity in the twentieth century.
- (j) They studied the work/works of three groups of employees over two years.

5 Practice B

- Read the text and choose the correct alternative.

A high percentage of company/companies has/have developed website/websites in the last few years. Trading using the Internet is called e-commerce/e-commerces, and this/these is/are divided into two main kinds: B2B and B2C. The former involves trading between business/businesses, but many company/companies want to use the Internet to sell directly to its/their customers (B2C). However, large numbers have experienced trouble/troubles with security/securities and other practical issues. In addition, the high start-up costs and the expense/expenses of advertising means/mean that this/these company/companies often struggle to make a profit.

UNIT 2.13

Style

There is no one correct style of academic writing, but in general it should attempt to be accurate, impersonal and objective. For example, personal pronouns like ‘I’ and idioms (i.e. informal language) are used less often than in other kinds of writing. Students should study examples of writing in their own subject area, and then aim to develop their own ‘voice’. This unit gives guidelines for an appropriate style, and provides practice.

1 Components of academic style

- Study this paragraph and underline any examples of poor style.

How to make people work harder is a topic that lots of people have written about in the last few years. There are lots of different theories etc and I think some of them are ok. When we think about this we should remember the old Chinese proverb, that you can lead a horse to water but you can’t make it drink. So how do we increase production? It’s quite a complex subject but I’ll just talk about a couple of ideas.

Some of the problems with the style of this paragraph can be analysed as follows:

Poor style	Reason
How to make people work harder . . .	Imprecise vocabulary – use ‘motivation’
. . . lots of people . . .	Vague – give names
. . . the last few years.	Vague – give dates
lots of different . . .	Avoid ‘lots of’

Poor style	Reason
... etc ...	Avoid using 'etc.' and 'so on'
... I think ...	Too personal
... are ok.	Too informal
When we think about this ...	Too personal
... the old Chinese proverb ...	Do not quote proverbs or similar expressions
So how do we increase production?	Avoid rhetorical questions
It's quite a ...	Avoid contractions
... I'll just talk about a couple ...	Too personal and informal

The paragraph could be re-written in more suitable style:

Motivation has been the subject of numerous studies during recent decades, but this essay will focus on Maslow's hierarchy of needs theory (1943) and Herzberg's two-factor theory (1966). Their contemporary relevance to the need to motivate employees effectively will be examined critically, given that this can be considered crucial to a firm's survival in the current economic climate.

2 Guidelines

There are no rules for academic style that apply to all situations, and all academic disciplines. The following guidelines should help you develop a style of your own.

- Do not use idiomatic or colloquial vocabulary: *kids*, *boss*. Instead use standard English: *children*, *manager*.
- Use vocabulary accurately. There is a difference between *rule* and *law*, or *weather* and *climate*, which you are expected to know if you study these subjects.
- Be as precise as possible when dealing with facts or figures. Avoid phrases such as *about a hundred* or *hundreds of years ago*. If it is necessary to estimate numbers, use *approximately* rather than *about*.
- Conclusions should use tentative language. Avoid absolute statements such as *unemployment causes crime*. Instead, use cautious phrases: *unemployment may cause crime* or *tends to cause crime*.
- Avoid adverbs that show your personal attitude: *luckily*, *remarkably*, *surprisingly*.
- Do not contract verb forms: *don't*, *can't*. Use the full form: *do not*, *cannot*.

- (g) Although academic English tends to use the passive more than standard English, it should not be overused. Both are needed. Compare:

Galileo discovered the moons of Jupiter.

The moons of Jupiter were discovered by Galileo.

In the first case, the focus is on Galileo, in the second (passive) on the moons.

► See **Unit 2.9** Passives

- (h) Avoid the following:

- *like* for introducing examples. Use *such as* or *for instance*.
- *thing* and combinations *nothing* or *something*. Use *factor*, *issue* or *topic*.
- *lots of*. Use *a significant/considerable number*.
- *little/big*. Use *small/large*.
- ‘get’ phrases such as *get better/worse*. Use *improve* and *deteriorate*.
- *good/bad* are simplistic. Use *positive/negative* (e.g. *the changes had several positive aspects*).

- (i) Do not use question forms such as *Why did war break out in 1914?* Instead, use statements: *There were three reasons for the outbreak of war . . .*
- (j) Avoid numbering sections of your text, except in reports and long essays. Use conjunctions and signposting expressions to introduce new sections (*Turning to the question of detecting cancer . . .*).
- (k) When writing lists, avoid using *etc.* or *and so on*. Insert *and* before the last item: *The main products were pharmaceuticals, electronic goods and confectionery.*
- (l) Avoid using two-word verbs such as *go on* or *bring up* if there is a suitable synonym. Use *continue* or *raise*.

► See **Unit 3.4** Academic Vocabulary: Verbs and Adverbs

3 Practice A

- In the following sentences, underline examples of bad style and rewrite them in a more suitable way.

- (a) Another thing to think about is the chance of crime getting worse.

- (b) Regrettably these days lots of people don't have jobs.

(c) Sometime soon they will find a vaccine for malaria.

(d) A few years ago the price of property in Japan went down a lot.

(e) You can't always trust the numbers in that report.

(f) Sadly, the high inflation led to poverty, social unrest and so on.

(g) He was over the moon when he won the prize.

(h) I think we should pay students to study.

(i) A few years ago they allowed women to vote.

(j) What were the main causes of the Russian Revolution?

4 Avoiding repetition and redundancy

Instead of repeating the same word in a short text:

*Most family businesses employ less than 10 people. These **businesses** . . .*

Try to make the text more interesting by using synonyms:

*Most family businesses employ less than 10 people. These **firms** . . .*

► See Unit 3.11 Synonyms

Redundancy (i.e. repeating an idea or including an irrelevant point) suggests that the writer is not fully in control of the material. It gives the impression that either he or she does not properly understand the language or is trying to 'pad' the essay by repeating the same point. Avoid statements such as:

Homelessness is a global problem in the whole world.

Good writing aims for economy and precision:

Homelessness is a global problem.

- In the following text, remove all repetition and redundancy, rewriting where necessary.

FAST FOOD

Currently these days, fast food is growing in popularity. Fast food is a kind of food that people can buy ready to eat or cook quickly. This essay examines the advantages of fast food and the drawbacks of fast food. First above all, fast food is very convenient. Most of the people who work in offices are very busy, so that they do not have time to go to their homes for lunch. But the people who work in offices can eat in restaurants such as McDonald's, which are franchised in hundreds of countries. In addition, the second benefit of fast food is its cheapness. As it is produced in large quantities, this high volume means that the companies can keep costs down. As a result fast food is usually less expensive than a meal in a conventional restaurant.

5 Varying sentence length

Short sentences are clear and easy to read:

Car scrappage schemes have been introduced in many countries.

But too many short sentences are monotonous:

Car scrappage schemes have been introduced in many countries. They offer a subsidy to buyers of new cars. The buyers must scrap an old vehicle. The schemes are designed to stimulate the economy. They also increase fuel efficiency.

Long sentences are more interesting, but can be difficult to construct and read:

Car scrappage schemes, which offer a subsidy to buyers of new cars (who must scrap an old vehicle) have been introduced in many countries; the schemes are designed to stimulate the economy and also increase fuel efficiency.

Effective writing normally uses a mixture of long and short sentences, often using a short sentence to introduce the topic:

Car scrappage schemes have been introduced in many countries. They offer a subsidy to buyers of new cars, who must scrap an old vehicle. The schemes are designed to stimulate the economy and also increase fuel efficiency.

- Rewrite the following paragraph so that instead of six short sentences, there are two long and two short sentences.

Worldwide, enrolments in higher education are increasing. In developed countries over half of all young people enter college. Similar trends are seen in China and South America. This growth has put financial strain on state university systems. Many countries are asking students and parents to contribute. This leads to a debate about whether students or society benefit from tertiary education.

■ The following sentence is too long. Divide it into shorter ones.

China is one developing country (but not the only one) which has imposed fees on students since 1997, but the results have been surprising: enrolments, especially in the most expensive universities, have continued to rise steeply, growing 200 per cent overall between 1997 and 2011; it seems in this case that higher fees attract rather than discourage students, who see them as a sign of a good education, and compete more fiercely for places, leading to the result that a place at a good college can cost \$8,000 per year for fees and maintenance.

Until you feel confident in your writing, it is better to use shorter rather than longer sentences. This should make your meaning as clear as possible.

6 The use of caution

A cautious style is necessary in many areas of academic writing to avoid making statements that can be contradicted:

*Demand for healthcare **usually** exceeds supply.*

***Most** students find writing exam essays difficult.*

*Fertility rates **tend to** fall as societies get richer.*

Areas where caution is particularly important include:

- (a) outlining a hypothesis that needs to be tested (e.g. in an introduction)
- (b) discussing the results of a study, which may not be conclusive
- (c) commenting on the work of other writers
- (d) making predictions (normally with **may** or **might**)

Caution is also needed to avoid making statements that are too simplistic:

Crime is linked to poor education.

Such statements are rarely completely true. There is usually an exception that needs to be considered. Caution can be shown in several ways:

*Crime **may be** linked to poor education.* (modal verb)

*Crime **is frequently** linked to poor education.* (adverb)

*Crime **tends to be** linked to poor education.* (verb)

- Complete the table below with more examples.

Modals	Adverbs	Verb/phrase
<i>can</i>	<i>commonly</i>	<i>tends to</i>

- See [Unit 2.8](#) Generalisations

7 Using modifiers

Another way to express caution is to use **quite**, **rather** or **fairly** before an adjective:

a fairly accurate summary

a rather inconvenient location

quite a significant discovery

NB: **quite** is often used before the article. It is generally used positively, while **rather** tends to be used negatively.

- Insert **quite/rather/fairly** in the following to emphasise caution.

- The company's efforts to save energy were successful.
- The survey was a comprehensive study of student opinion.
- His second book had a hostile reception.
- The first year students were fascinated by her lectures.
- The latest type of arthritis drug is expensive.

8 Practice B

- Rewrite the following sentences in a more cautious way.

- Private companies are more efficient than state-owned businesses.
- Exploring space is a waste of valuable resources.

- (c) Older students perform better at university than younger ones.
- (d) Word-of-mouth is the best kind of advertising.
- (e) English pronunciation is confusing.
- (f) Some cancers are caused by psychological factors.
- (g) Global warming will cause the sea level to rise.
- (h) Most shopping will be done on the Internet in 10 years' time.

[illegible]

In many subjects, it is essential to support your writing with statistical data. Visual devices such as graphs and tables are a convenient way of displaying large quantities of information in a form that is easy to understand. This unit explains and practises the language connected with these devices.

1 Types of visuals

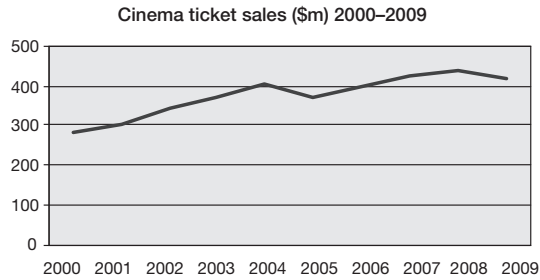
Below are examples of some of the main types of visuals used in academic texts.

■ Complete the table below to show the main use (a-f) and the example (A-F) of each type.

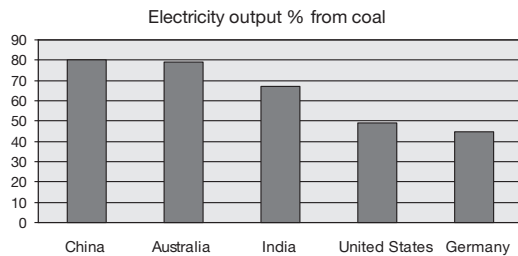
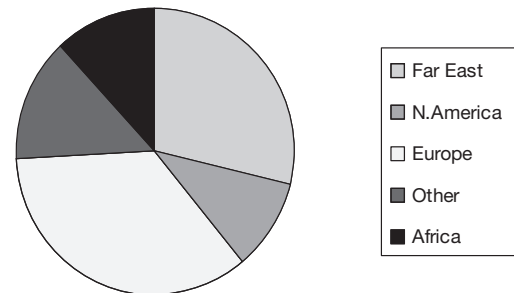
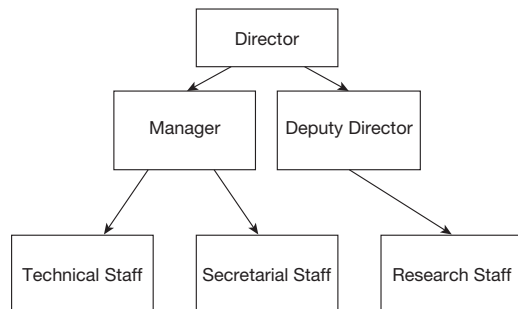
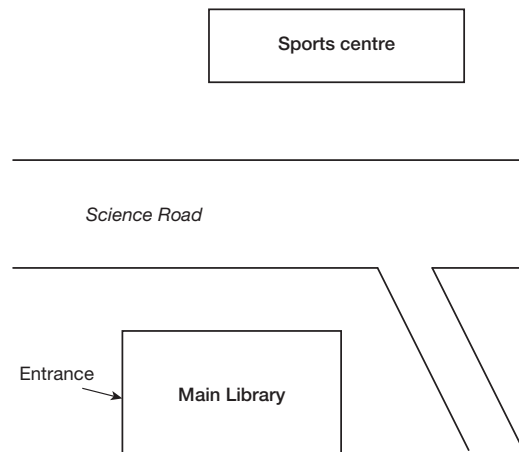
Uses:

(a) location	(d) structure
(b) comparison	(e) changes in time
(c) proportion	(f) statistical display

Types	Uses	Example
1 Diagram		
2 Table		
3 Map		
4 Pie chart		
5 Bar chart		
6 Line graph		

(A) Cinema ticket sales**(B) Average life expectancy (in years)**

Japan	81.6
France	79.0
United States	77.1
South Korea	75.5
Ghana	57.9
South Africa	47.7
Kenya	44.6
Zimbabwe	33.1

(C) Electricity output from coal**(D) Origins of international students****(E) Organisation of the research unit****(F) Position of the main library**

2 The language of change (past tenses in brackets)

Verb 	Adverb	Verb 	Adjective + noun
grow (grew)	slightly	drop (dropped)	a slight drop
rise (rose)	gradually	fall (fell)	a gradual fall
increase (increased)	steadily	decrease (decreased)	a steady decrease
climb (climbed)	sharply	decline (declined)	a sharp decline
<i>also: a peak, to peak, a plateau, to level off, a trough</i>			

- Study the graph below and complete the description with phrases from the table above.

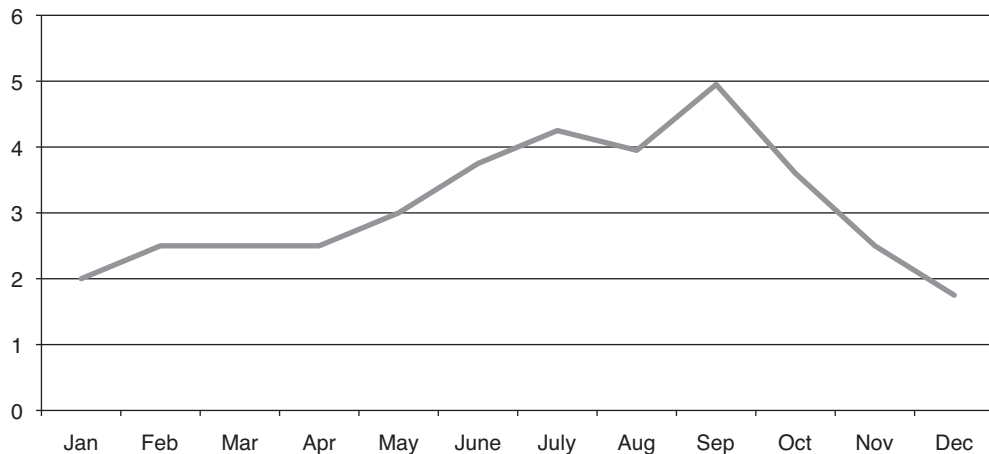


Figure 1 Inflation January–December

The graph shows that the rate of inflation was 2 per cent in January, and then (a) _____ to 2.5 per cent in February. After that it (b) _____ until April, and then (c) _____ (d) _____ to over 4 per cent in July. Inflation fell (e) _____ in August, but (f) _____ to a (g) _____ of 5 per cent in September. Subsequently, it (h) _____ (i) _____ to below 2 per cent in December.

3 Describing visuals

Although visuals do largely speak for themselves, it is common to help the reader interpret them by briefly commenting on their main features.

The graph map diagram	shows illustrates displays	the changes in the price of oil since 1990. the main sources of copper in Africa. the organisation of both companies.
-----------------------------	----------------------------------	---

■ (A) Read the following descriptions of the chart below. Which is better, and why?

- (i) The chart ([Figure 2](#)) shows the quantity of tea consumed by the world's leading tea consuming nations. India and China together consume more than half the world's tea production, with India alone consuming about one third. Other significant tea consumers are Turkey, Russia and Britain. 'Others' includes the United States, Iran and Egypt.
- (ii) The chart ([Figure 2](#)) shows that 31 per cent of the world's tea is consumed by India, 23 per cent by China, and 8 per cent by Turkey. The fourth largest consumers are Russia, Japan and Britain, with 7 per cent each, while Pakistan consumes 5 per cent. Other countries account for the remaining 12 per cent.

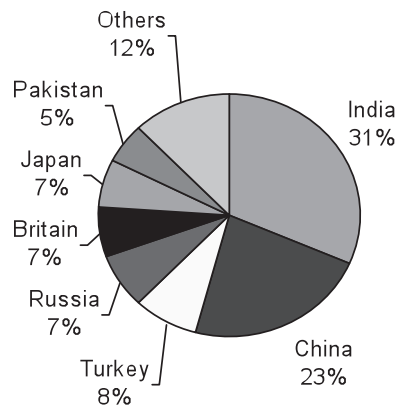


Figure 2 World tea consumption

Source: The Tea Council

■ (B) Complete the description of the chart below.

The bar chart (Figure 3) shows population (a) _____ in a variety of countries around the world. It (b) _____ the extreme contrast (c) _____ crowded nations such as South Korea (475 people per sq. km) and much (d) _____ countries such as Canada (3 people per sq. km). Clearly, climate plays a major (e) _____ in determining population density, (f) _____ the least crowded nations (g) _____ to have extreme climates (e.g. cold in Russia or dry in Algeria).

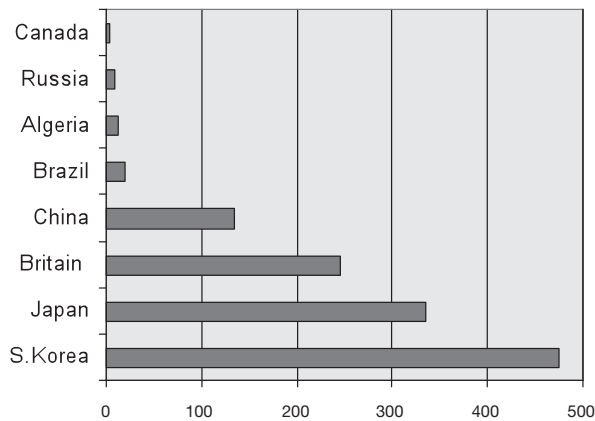


Figure 3 Population density (people per sq. km)

Source: OECD

4 Labelling

- When referring to visual information in the text, the word ‘figure’ is used for almost everything (such as maps, charts and graphs) except tables (see examples above).
- Figures and tables should be numbered and given a title. Titles of tables are written above, while titles of figures are written below the data.
- As with other data, sources must be given for all visual information.
- If you are writing a lengthy work such as a dissertation, you will need to provide lists of tables and figures, showing numbers, titles and page numbers after the contents page.

5 Practice A

- Complete the following description of the table below (one word per gap).

Table 1 Projected population changes in various European countries 2010–2050 (millions)

Country	Population 2010	Projected population 2050	Change
France	62	67	+ 5
Germany	82	71	– 11
Italy	60	57	– 3
Poland	38	32	– 6
Portugal	10.7	10	– 0.7
Russia	140	116	– 24
Spain	45	51	+ 6
UK	61	72	+ 11

Source: UN

The table (a) _____ the projected population changes in
 (b) _____ European countries (c) _____ 2010 and 2050. It can
 be seen that in a (d) _____ the population is expected to fall, in some
 cases (e.g. Germany and Russia) quite (e) _____. However, the population
 of France, (f) _____ and the UK is predicted to increase, in the case of
 the last two by more (g) _____ 10 per cent.

6 Practice B

■ Write a paragraph commenting on the data in the table below.

Table 2 Student survey of library facilities: % students rating facilities as good

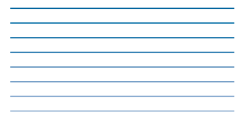
Library facilities	Undergraduates (%)	Postgraduates (%)
Opening hours	72	63
Staff helpfulness	94	81
Ease of using electronic catalogue	65	87
Availability of working space	80	76
Café area	91	95
Availability of short loan stock	43	35
Quality of main book stock	69	54

Source: Author

Vocabulary for Writing

PART

3



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UNIT 3.1

Approaches to Vocabulary

International students may be understandably concerned by the quantity and complexity of vocabulary required for reading academic texts in their subject area. But developing vocabulary involves more than learning lists of words. [Part 3](#) provides a variety of approaches to improving students' understanding in this area.

1 Introduction

- This paragraph illustrates some of the vocabulary difficulties facing students when reading and writing academic texts. Read it carefully, paying particular attention to words in bold.

Going to Extremes?

Muller (2012) **maintains** that the increased frequency of extreme weather events is linked to global warming, **in particular** to rising sea temperatures. **However**, McKenzie (2013) **insists** Muller has **a bee in his bonnet** on this topic, caused by using a **dysfunctional** model, and that there is no real evidence that **phenomena** such as flooding and hurricanes are becoming more common. He considers that the **key** issue is the growing population in areas vulnerable to events such as floods. Muller's **principal** concern is a rise in the temperature of the north Pacific Ocean of **0.5° C** since 1968, which McKenzie regards as being within the normal range of historical fluctuation. But Javez (2009) and Simmonds (2011), *inter alia*, have argued for an international research programme under the auspices of **UNESCO** to monitor these events, given the **threefold** rise in the cost of insurance claims since 2000.

- Study the table below, which shows where this type of vocabulary is dealt with more fully.

Line	Item	Vocabulary issue	Unit
1 3	maintains insists	referring verbs for summarising ideas	3.4
2	in particular however	conjunctions	3.5
3	a bee in his bonnet	idiom	3.1
4	dysfunctional	can be understood by the prefix	3.7
4	phenomena	approximate synonym for events	3.10
5	key	metaphor	3.1
7	principal	often confused with 'principle'	3.1
7 11	0.5° C threefold	numerical information	3.6
9	inter alia	phrase from another language	3.1
10	UNESCO	abbreviation	3.2

2 Discussing language

The following words (all nouns) are used to describe common features of language.

- Discuss the words in the list with a partner. Try to think of an example of each.

Ambiguity	Where more than one meaning is possible; lack of clarity
Anecdote	A story told to illustrate a situation or idea
Cliché	An overused idea or phrase; lacking in freshness
Euphemism	Word or phrase used to avoid the embarrassment of naming something directly
Exaggeration	Making something better or worse than reality
Idiom	Common phrase used in colloquial speech; meaning of which is not obvious
Metaphor	A word used to describe something different from the original meaning
Paradox	An idea that seems wrong but yet may be true
Proverb	A traditional statement or rhyme containing advice or a moral

Saying	An often-repeated comment that seems to contain some truth
Simile	A comparison of two things, using 'like' or 'as'
Slogan	A frequently repeated phrase used in advertising or politics
Statement	A rather formal comment on a situation
Synopsis	A summary of something
Understatement	Saying less than you feel; the opposite of exaggeration

3 Practice

- Study the following sentences and decide which of the features listed above is illustrated by each one.

- (a) He argued that allowing students to smoke on campus would destroy the college's reputation. (exaggeration)
- (b) The President said she regretted the loss of life in the typhoon and sympathised with the survivors. (_____)
- (c) At the beginning of the lecture Professor Chang told them about an accident she had seen that morning. (_____)
- (d) There's no such thing as a free lunch, he warned them. (_____)
- (e) The author of the report passed away on November 21st. (_____)
- (f) He told the class that their law course was a voyage over an uncharted ocean. (_____)
- (g) After his laptop was stolen, with the only copy of his dissertation on it, he said he felt rather annoyed. (_____)
- (h) She said that the older she got, the less she seemed to know. (_____)
- (i) After the price rise, sales fell like a stone. (_____)
- (j) It is said that the early bird catches the worm. (_____)
- (k) Their teacher explained that the novel consisted of two parts; the first historical, the second contemporary. (_____)
- (l) He was over the moon when he won the scholarship. (idiom)
- (m) 'Finger lickin' good' has sold millions of chicken meals. (_____)
- (n) His feelings towards his old school were a mixture of love and hate. (_____)
- (o) Paris is the capital of romance; the city for lovers. (_____)

4 Confusing pairs

Certain common words cause confusion because they have similar but distinct spellings and meanings:

*The drought **affected** the wheat harvest in Australia*

*An immediate **effect** of the price rise was a fall in demand*

‘Affect’ and ‘effect’ are two different words. ‘Affect’ is a verb, while ‘effect’ is commonly used as a noun.

- Study the differences between other similar confusing pairs (most common use in brackets).

accept (verb)/except (prep)

It is difficult to **accept** their findings

The report is finished **except** for the conclusion

compliment (noun/verb)/complement (verb)

Her colleagues **complimented** her on her presentation

His latest book **complements** his previous research on African politics

economic (adj)/economical (adj)

Inflation was one economic **result** of the war

Sharing a car to go to work was an **economical** move

its (pronoun)/it’s (pronoun + verb)

The car’s advanced design was **its** most distinct feature

It’s widely agreed that carbon emissions are rising

lose (verb)/loose (adj)

No general ever plans to **lose** a battle

He stressed the **loose** connection between religion and psychology

principal (adj/noun)/principle (noun)

Zurich is the **principal** city of Switzerland

All economists recognise the **principle** of supply and demand

rise (verb – past tense rose)/raise (verb – past tense raised)

The population of Sydney **rose** by 35 per cent in the century

The university **raised** its fees by 10 per cent last year

site (noun)/sight (noun)

The **site** of the battle is now covered by an airport

His **sight** began to weaken when he was in his eighties

tend to (verb)/trend (noun)

Young children **tend to** enjoy making a noise

In many countries there is a **trend** towards smaller families

■ Choose the correct word in each sentence.

- (a) The company was founded on the principals/principles of quality and value.
- (b) Millions of people are attempting to lose/loose weight.
- (c) Sunspots have been known to affect/effect radio communication.
- (d) Professor Poledna received their compliments/complements politely.
- (e) The ancient symbol depicted a snake eating it's/its tail.
- (f) Both social and economical/economic criteria need to be examined.
- (g) It took many years for some of Einstein's theories to be accepted/excepted.

5 Words and phrases from other languages

When reading academic texts, you may meet words and phrases from other languages, usually Latin, German or French. They are generally used because there is no exact English equivalent, and they are often printed in italics:

While the basic tripartite division of the theory into *jus ad bellum*, *jus in bello* and *jus post-bellum*, and the criteria related to each . . .

(meaning: reasons for going to war, laws of warfare and rules for post-war)

You are not expected to use these phrases in your own writing, but it is useful to understand them when you read. They can be found in a dictionary, but some of the more common are listed below:

Latin

<i>ad hoc</i>	unplanned
<i>de facto</i>	as it really is
<i>de jure</i>	according to law
<i>inter alia</i>	among others
<i>in vitro</i>	studies conducted on isolated organs (in Biology)
<i>pro rata</i>	proportional

French

<i>à propos</i>	on the subject of
<i>ancien regime</i>	old ruling system
<i>coup d'état</i>	military take-over
<i>fait accompli</i>	accomplished fact
<i>raison d'être</i>	reason for living

German

<i>Bildungsroman</i>	a story of growing-up
<i>Mitteleuropa</i>	central Europe
<i>Realpolitik</i>	political reality
<i>Zeitgeist</i>	spirit of the times

UNIT 3.2

Abbreviations

Abbreviations are an important and expanding feature of contemporary English, widely used for convenience and space-saving. Students need to be familiar with general and academic abbreviations.

1 Types of abbreviation

Abbreviations take the form of shortened words, acronyms or other abbreviations, as shown below:

- (a) **Shortened words** are often used without the writer being aware of the original form. 'Bus' comes from 'omnibus', which is hardly used in modern English. However, 'refrigerator' is still better in written English than the informal 'fridge'. Yet, 'lab' for 'laboratory', 'memo' for 'memorandum' and 'vet' for 'veterinary surgeon' are quite standard.
- (b) **Acronyms** are made up of the initial letters of a name or phrase (e.g. AIDS = Acquired Immune Deficiency Syndrome). They are pronounced as words.
- (c) **Other abbreviations** are read as sets of individual letters. They include names of countries, organisations and companies (USA/BBC), and also abbreviations that are only found in written English (e.g. PTO means 'please turn over'). Note that in many cases, abbreviations are widely used without most users knowing what the individual letters stand for (e.g. DNA, DVD).

2 Some common abbreviations

AGM	annual general meeting
BA	Bachelor of Arts
BCE	before common era
BSc	Bachelor of Sciences
CV	curriculum vitae
DIY	do-it-yourself
EU	European Union
FE	further education (non-university study above 18)
GM	genetically modified
GNP	gross national product
HE	higher education (university study above 18)
HRM	human resource management
ICT	information and communications technology
IMF	International Monetary Fund
LLB	Bachelor of Laws
MA	Master of Arts
MSc	Master of Science
PG	postgraduate
PGCE	Postgraduate Certificate of Education
PhD	Doctor of Philosophy
PLC	public limited company
PR	public relations
UCAS	Universities and Colleges Admissions Service
UG	undergraduate
UN	United Nations
URL	uniform resource locator (website address)
VC	Vice-Chancellor
WTO	World Trade Organisation

However, writers also employ more specialised abbreviations in texts, which are explained in brackets on first use:

Starting from the resource-based view (RBV) of the firm, it is argued that . . .

The Technology Readiness Index (TRI) was introduced by Parasuraman (2000).

Note that the first time a phrase is used, it must be written in full, but on subsequent occasions the abbreviation can be used alone.

3 Punctuation

There are many standard abbreviations that have a full stop after them to show that it is a shortened form of a word (lt. = litre). Other examples are govt. (government), co. (company) and Oct. (October). With acronyms and other abbreviations, it is now normal to write the letters without full stops (e.g. BBC, ABS).

4 Duplicate abbreviations

Abbreviations can be confusing. PC, for example, may stand for ‘personal computer’ but also ‘politically correct’ or ‘Police Constable’. It is useful to be aware of these potential confusions. A good dictionary should be used to understand more unusual abbreviations.

5 Abbreviations in writing

While all academic subjects have their own abbreviations, there are certain abbreviations common to all types of academic writing. They include:

anon.	anonymous (no author)
asap	as soon as possible
<i>c.</i>	<i>circa</i> (in dates – about)
cf.	compare
ed.	editor/edition
e.g.	for example
<i>et al.</i>	and others (used in place of names of multiple authors)
etc.	et cetera (and so on – do not use this in academic work)
Fig.	figure (for labelling charts and graphs)
<i>ibid.</i>	in the same place (to refer to source mentioned immediately before)
i.e.	that is
K	thousand
NB.	take careful note
nd	no date (i.e. an undated source)
<i>op. cit.</i>	in the source mentioned previously
p.a.	yearly (per annum)
pp.	pages
PS	postscript
re:	with reference to
vs	versus

6 Practice

■ Explain the abbreviations in the following sentences.

- (a) The failure rate among ICT projects in HE reaches 40 per cent (Smith *et al.*, 2008).
- (b) GM technology is leading to advances in many fields (e.g. forestry).
- (c) The world's most populous country (i.e. China) joined the WTO in 2001.
- (d) NB. CVs must be submitted to HR by 30 June.
- (e) The city seems to have been destroyed c.2,500 BCE.
- (f) The EU hopes to achieve a standard rate of VAT.
- (g) Her PhD examined the threat of TB in SE Asia.
- (h) Fig. 4 Trade patterns on the www (2003–2008).
- (i) The VC is meeting the PGCE students.
- (j) Director of PR required – salary approx. \$75K.
- (k) Re: the AGM next month: the report is needed asap.
- (l) Prof. Wren claimed that the quality of MSc and MA research was falling.

UNIT
3.3

Academic Vocabulary

Nouns and Adjectives

To read and write academic papers effectively, students need to be familiar with the rather formal vocabulary widely used in this area. This unit focuses on nouns and adjectives, while [Unit 3.4](#) looks at verbs and adverbs.

1 Introduction

The quantity and complexity of vocabulary needed to read academic texts often concerns international students. But it is worth remembering that much of that vocabulary is specific to your subject area, for example in the sentence:

The effectiveness of this malaria vaccine has been a subject of controversy.

‘Malaria vaccine’ will be understood by medical students, while ‘effectiveness’ and ‘controversy’ are general academic vocabulary that all students need to understand. The focus of this course is on the general vocabulary common to most disciplines.

2 Nouns

- Study the following list of common nouns with examples of use. With a partner, discuss the meaning of each noun.

accuracy

Repeating the experiment will improve the **accuracy** of the results.

analysis	His analysis of the alloy showed a high percentage of copper.
approach	Professor Han has brought a new approach to the study of genetics.
assessment	She failed the first module assessment but passed the final one.
assumption	He made the assumption that all the students spoke French.
authority	Dr James is our leading authority on maritime law.
category	Her work established two categories of local governance.
claim	Their claim that the island was first inhabited in 550 BCE is false.
controversy	Climate change is an issue that has caused much controversy .
correlation	They found a correlation between height and health.
deterrent	The harsh climate of the desert acted as a deterrent to exploration.
emphasis	Their teacher put the emphasis on practical research.
evidence	The X-ray provided evidence of his lung infection.
exception	The Tesla is an exception to the idea of slow, small electric cars.
extract	He read a short extract from his paper on Hegel to the class.
ideology	Military power was at the heart of Roman ideology .
implication	The implication of the report is that we need to do more research.
innovation	Steam power was a significant innovation in the eighteenth century.
intuition	Intuition has been described as 'a gut feeling'.
motivation	Money is often claimed to be the motivation for most workers.
perspective	Sigmund Freud's work opened a new perspective on human behaviour.
phenomenon	Earthquakes are an unusual phenomenon in Britain.
policy	The university has a zero-tolerance policy on plagiarism.
preference	Her preference was criminal law, but other fields were more profitable.
process	The drug trials involved a three-stage process that took two years.
proposal	The Professor's proposal for more seminars was rejected.
provision	The library has increased its provision of computer terminals by 100 per cent.

sequence	Writing is a sequence of reading, note-taking, planning and drafting.
strategy	Swimming every day was part of his strategy for getting fit.
substitute	To what extent can natural gas be a substitute for oil?
technique	She developed a new technique for collecting the beetles.
validity	Events confirmed the validity of his prediction.

■ Complete each sentence with a suitable noun.

- The excavation found no _____ of human settlement before 1250 BCE.
- The tutor asked the class for their _____ for next semester's topics.
- Many great discoveries were based on _____ rather than logic.
- Due to the rising birth rate _____ was made for more school places.
- Few believed Galileo's _____ that the earth went round the sun.

3 Using nouns and adjectives

It is easy to confuse the noun and adjective form of words such as 'possible' and 'possibility'.

■ Compare these sentences:

*The **efficiency** of the machine depends on the **precision** of its construction.*

***Precise** construction results in an **efficient** machine.*

The first sentence uses the nouns 'efficiency' and 'precision'. The second uses adjectives: 'precise' and 'efficient'. Although the meaning is similar, the first sentence is more formal. Effective academic writing requires accurate use of both nouns and adjectives.

■ Complete the gaps in the table below.

Noun	Adjective	Noun	Adjective
<i>approximation</i>	approximate		particular
superiority		reason	
	strategic		synthetic
politics		economics/economy*	
	industrial		cultural
exterior		average	

Noun	Adjective	Noun	Adjective
	high		reliable
heat		strength	
	confident		true
width		probability	
	necessary		long
danger		relevance	

* Compare the three nouns:

Economics is a demanding undergraduate degree course (academic subject)

The Greek **economy** is heavily in debt (national economy, countable)

Economy is needed to reduce the deficit (saving money, uncountable)

4 Practice A

■ Insert a suitable noun or adjective from the table in each sentence.

- The students were _____ their project would be successful.
- One of Tokyo's _____ is its excellent transport system.
- There is a strong _____ that fees will rise next year.
- The students complained that the lecture was not _____ to their course.
- The results are so surprising it will be _____ to repeat the experiment.
- The _____ household size in Turkey is 4.1.
- Regularly backing up computer files reduces the _____ of losing vital work.
- Revising for exams is a tedious _____.
- These data appear to be _____ and should not be trusted.
- The _____ date of the founding of Rome is 750 BCE.
- The _____ consequences of the war were inflation and unemployment.
- They attempted to make a _____ of all the different proposals.

5 Academic adjectives

The following adjectives are best understood and learnt as opposites:

absolute	relative
abstract	concrete
accurate	inaccurate
ambiguous	unambiguous
analytic	synthetic
effective	ineffective
exclusive	inclusive
logical	illogical
metaphorical	literal
precise	vague or approximate or rough
rational	irrational
reliable	unreliable
relevant	irrelevant
specific	non-specific
subjective	objective
theoretical	practical or empirical or pragmatic

Examples:

*Inflation is an **abstract** concept.*

*The **metaphorical** use of the word 'key' is probably more common than its **literal** one.*

*The study of engineering is very **relevant** to architecture.*

*Her study of women in education was criticised for being too **subjective**.*

*In Europe, **empirical** research began in the sixteenth century.*

6 Practice B

- Complete each sentence with a suitable adjective from the list in (5) on p. 169.

- (a) The teacher complained that the quotes were _____ to the title.
- (b) His _____ approach led him to ignore some inconvenient facts.
- (c) _____ examples are needed to make the argument clear.
- (d) It is sufficient to give _____ figures for national populations.
- (e) Poverty is usually regarded as a _____ concept.
- (f) They approached the task in a _____ way by first analysing the title.
- (g) The students preferred examining case studies to _____ discussion.
- (h) The results were _____: the victims had definitely been poisoned.

7 Practice C

- Underline the adjective in each sentence and write the related noun in brackets.

Example:

Several steel producers are likely to shut down next year. (likelihood)

- (a) The HR team have just completed a strategic review of pay. (_____)
- (b) Dr Lee adopted an analytical approach to the inquiry. (_____)
- (c) Nylon was one of the earliest synthetic fibres. (_____)
- (d) Her major contribution to the research was her study of ante-natal care.
(_____)
- (e) All advertising must respect cultural differences. (_____)
- (f) Some progress was made in the theoretical area. (_____)
- (g) A frequent complaint is that too much reading is expected. (_____)
- (h) We took a more critical approach to marketing theory. (_____)
- (i) The Department of Social Policy is offering three courses this year.
(_____)
- (j) Finally, the practical implications of my findings will be examined.
(_____)

Students wishing to develop their academic vocabulary should study the Academic Word List (AWL). This is a list of 570 items commonly found in academic texts across various disciplines, created by Averil Coxhead.

See Sandra Haywood's website for information about the AWL, with further practice exercises: www.nottingham.ac.uk/~alzsh3/acvocab/

UNIT
3.4

Academic Vocabulary

Verbs and Adverbs

When reading a text, it is useful to identify and understand the main verb: this is often the key to understanding the whole sentence. This unit looks at the more formal verbs used in academic writing, the verbs of reference used to introduce summaries, and outlines the use of adverbs.

1 Understanding main verbs

- Study the following sentence and underline the main verbs:

The author concludes that no reasonable alternative is currently available to replace constitutional democracy, even though he does not completely reject the possibility of creating a better political system in the future.

To follow the writer's meaning, the reader needs to be clear that 'conclude' and 'reject' are the main verbs in the two parts of the sentence.

Academic writing tends to use rather formal verbs to express the writer's meaning accurately:

*In the last decade the pace of change **accelerated**.*

*Could Darwin have **envisaged** the controversy his work has caused?*

In spoken English, we are more likely to use 'speed up' and 'imagined'.

■ Study the list below and find a synonym in each case.

(Some of these verbs (e.g. 'hold') are used in academic writing with a special meaning.)

Verb	Example of use	Synonym
to adapt	the health system has been adapted from France	<i>modify</i>
to arise	a similar situation arises when we look at younger children	
to conduct	the largest study was conducted in Finland	
to characterise	developing countries are characterised by . . .	
to clarify	the project was designed to clarify these contradictions	
to concentrate on	that study concentrated on older children	
to be concerned with	the programme is concerned primarily with . . .	
to demonstrate	further research has demonstrated that few factors . . .	
to determine	the water content was experimentally determined	
to discriminate	a failure to discriminate between the two species	
to establish	the northern boundary was established first	
to exhibit	half of the patients exhibited signs of improvement	
to focus on	her work focused on female managers	
to generate	a question that has generated a range of responses	
to hold	Newton's second Law, $F = ma$, holds everywhere	
to identify	three main areas have been identified	
to imply	his absence implies a lack of interest	
to interact	understand how the two systems interact	
to interpret	the result can be interpreted as a limited success	
to manifest	as manifested in antisocial behaviour	

Verb	Example of use	Synonym
to overcome	both difficulties were overcome in the first week	
to propose	they propose that social class is the main factor	
to prove	the use of solar power is proving successful	
to recognise	he is now recognised as a leading expert	
to relate to	the pattern was related to both social and physical factors	
to supplement	the diet was supplemented with calcium and iodine	
to undergo	the system underwent major changes in the 1980s	
to yield	both surveys yielded mixed results	

2 Using verbs of reference

Referring verbs are used to summarise another writer's ideas:

*Previn **argued** that global warming was mainly caused by the solar cycle.*

*Bakewell (1992) **found** that most managers tended to use traditional terms . . .*

They may also be used to introduce a quotation:

*. . . as Scott **observed**: 'Comment is free but facts are sacred.'*

Most of these verbs are followed by a noun clause beginning with 'that'.

(a) The following mean that the writer is presenting a case:

argue claim consider hypothesise suggest believe think state

*Melville (2007) **suggested** that eating raw eggs could be harmful.*

(b) A second group describe a reaction to a previously stated position:

accept admit agree with deny doubt

*Handlesmith **doubts** Melville's suggestion that eating raw eggs . . .*

(c) Others include:

assume conclude discover explain imply indicate maintain presume
reveal show

*Patel (2003) **assumes** that inflation will remain low.*

3 Practice A

- Write a sentence referring to what the following writers said (more than one verb may be suitable). Use the past tense.

Example:

Z: 'My research shows that biofuels are environmentally neutral.'

Z **claimed/argued** that biofuels were environmentally neutral.

- (a) A: 'I may have made a mistake in my calculations on energy loss.'
- (b) B: 'I did not say that women make better doctors than men.'
- (c) C: 'Small firms are more dynamic than large ones.'
- (d) D: 'I support C's views on small firms.'
- (e) E: 'I'm not sure, but most people probably work to earn money.'
- (f) F: 'After much research, I've found that allergies are becoming more common.'
- (g) G: 'I think it unlikely that electric cars will replace conventional ones.'
- (h) H: 'There may be a link between crime and sunspot activity.'

4 Further referring verbs

A small group of verbs is followed by the pattern (somebody/thing + for + noun/gerund):

blame censure commend condemn criticise

Lee (1998) **blamed** the media for creating uncertainty.

NB: All except 'commend' have a negative meaning.

Another group is followed by (somebody/thing + as + noun/gerund):

assess characterise classify define describe evaluate identify
interpret portray present

Terry **interprets** rising oil prices as a result of the Asian recovery.

5 Practice B

- Rewrite the following statements using verbs from the lists in (4) on p. 175.

Example:

K: 'Guttman's work is responsible for many of the current social problems.'

K **blamed** Guttman's work for many of the current social problems.

- (a) L: 'She was very careless about her research methods.'
- (b) M: 'There are four main types of children in care.'
- (c) N: 'That company has an excellent record for workplace safety.'
- (d) O: 'The noises whales make must be expressions of happiness.'
- (e) P: 'Wind power and biomass will be the leading green energy sources.'
- (f) Q: 'Darwin was the most influential naturalist of the nineteenth century.'

6 Using adverbs

In the sentence given here, adverbs are used to give information about time (currently) and degree (completely):

*The author concludes that no reasonable alternative is **currently** available to replace constitutional democracy, even though he does not **completely** reject the possibility of creating a better political system in the future.*

- (1) Adverbs are used in academic writing in a variety of ways. Among the most important are:

- (a) to provide more detail, with verbs and adjectives:

***Reasonably** good data are available for only . . .*

*. . . decomposition **eventually** ceases in modern landfills . . .*

- (b) individually, often at the beginning of sentences, to introduce new points or link sentences together:

***Currently**, the Earth's atmosphere appears to be warming up.*

***Alternatively**, the use of non-conventional renewable energies . . .*

NB: Adverbs used individually need to be employed with care. It is dangerous to overuse them, since they are often like the author's 'voice', commenting on the topic. As the academic writer aims to be objective, adverbs such as 'fortunately' or 'remarkably' may be unsuitable.

(2) Adverbs linked to verbs and adjectives usually fall into three groups:

(a) time (when?)

previously published

retrospectively examined

(b) degree (how much?)

declined considerably

contribute substantially

(c) manner (in what way?)

medically complicated

remotely located

Further common examples include:

<i>Time</i>	<i>Degree</i>	<i>Manner</i>
recently	clearly	(un)surprisingly
increasingly	particularly	factually
originally	broadly	politically
presently	highly	locally
currently	wholly	alternatively
traditionally	crucially	similarly
continuously	emphatically	psychologically

7 Practice C

■ Insert a suitable adverb from the lists above into the gaps in the sentences.

- Most houses do not have electricity. _____, then, there is little chance of improving living standards.
- _____, the Internet was mainly used for academic purposes.
- Some courses are assessed purely by exams. _____, coursework may be employed.
- _____, there has been growing concern about financing the health service.
- Many birds use bright colours to attract a mate. _____, flowers advertise their position to fertilising insects.
- _____, the development should be acceptable environmentally.

UNIT
3.5

Conjunctions

Conjunctions are words or phrases that join parts of a sentence together, or link a sentence to the next one. Effective reading and writing requires clarity about their meaning. This unit describes the different functions of conjunctions and practises their use. Other ways of linking sections of text are explained in [Unit 2.3 Cohesion](#).

1 Types of conjunctions

Note the way conjunctions work in the following sentences:

*Demand for food is increasing **because** the population is growing.*

*Mechanisation has increased crop yields, **yet** production is still inadequate.*

In the first sentence, ‘because’ introduces a reason; in the second, ‘yet’ indicates opposition.

■ **Underline the conjunctions in the following sentences.**

- (a) A few inventions, for instance television, have had a major impact on everyday life.
- (b) Furthermore, many patients were treated in clinics and surgeries.
- (c) The definition of ‘special needs’ is important since it is the cause of some disagreement.
- (d) The technology allows consumers a choice, thus increasing their sense of satisfaction.
- (e) Four hundred people were interviewed for the survey, then the results were analysed.
- (f) However, another body of opinion associates globalisation with unfavourable outcomes.

- There are six main types of conjunction. Match each of the types below to one of the sentences above.

- (i) Addition (6)
- (ii) Result (____)
- (iii) Reason (____)
- (iv) Opposition (____)
- (v) Example (____)
- (vi) Time (____)

2 Practice A

When reading a text, conjunctions are like signposts to help the reader follow the ideas.

- Read the paragraph below and underline the conjunctions, then decide what their functions are (i.e. types i-vi above).

BIOFUELS

Newly published research examines some important questions about the growing use of biofuels, such as ethanol made from maize. The production of these has increased sharply recently, but the replacement of food crops with fuel crops has been heavily criticised. Although initially seen as a more environmentally friendly type of fuel, the research shows that producing some biofuels, for instance biodiesel palm oil, is more polluting than using conventional oil. The ethanol produced from sugar cane, however, can have negative emissions, in other words taking carbon dioxide from the atmosphere instead of adding it. Consequently, it can be seen that the situation is rather confused, and that biofuels are neither a magic solution to the energy problem, nor are they the environmental disaster sometimes suggested.

Conjunction	Type	Conjunction	Type
(a) <i>such as</i>	<i>example</i>	(f)	
(b)		(g)	
(c)		(h)	
(d)		(i)	
(e)		(j)	

3 Common conjunctions

- Working with a partner, complete the table with as many examples of conjunctions as possible.

Addition	Result	Reason	Opposition	Example	Time

4 Practice B

- Insert a suitable conjunction into each gap.

- (a) _____ checking the equipment, the experiment was repeated.
(b) _____ most people use the train, a minority walk or cycle.
(c) Brick is a thermally efficient building material. It is, _____, cheap.
(d) Demand has increased for summer courses, _____ extra ones are offered this year.
(e) Many writers, _____ Chekhov, have been doctors.
(f) _____ the increase in residence fees, more students are moving out.
(g) _____ Mustafa was in the lecture, his car was being repaired.
(h) _____ he was studying Italian, he spent a semester in Bologna.

5 Practice C

- Insert a suitable conjunction into each gap.

Geoengineering

Geoengineers believe that it may be possible to counteract the effects of global warming by large scale engineering projects, (a) _____ the 'solar umbrella' designed to reflect sunlight back into space. (b) _____ no major

schemes have yet been attempted, there is already controversy about the risks involved.

Two different approaches are suggested: (c) _____ to block incoming sunlight, (d) _____ alternatively to take carbon dioxide out of the atmosphere. One proposal, (e) _____, consists of putting iron into the sea in order to encourage the growth of the tiny sea creatures which absorb carbon dioxide. (f) _____ this second approach is unlikely to create major problems, blocking sunlight is potentially dangerous, (g) _____ the risk of affecting rainfall patterns (h) _____ even ocean currents. (i) _____ bioengineers are anxious to establish clear guidelines before any large-scale experiments are carried out.

6 Conjunctions of opposition

In some ways, these are the most important type of conjunction, and can be the most difficult to use accurately. Note the position of the conjunctions in the following examples:

*The economy is strong, **but/yet** there are frequent strikes.*

***Although/while** there are frequent strikes, the economy is strong.*

***In spite of/despite** the frequent strikes, the economy is strong.*

*There are frequent strikes. **However/nevertheless**, the economy is strong.*

■ Write two sentences in each case.

Example: The equipment was expensive/unreliable.

*The equipment was expensive **but** unreliable.*

***Although** the equipment was expensive it was unreliable.*

(a) The government claimed that inflation was falling. The opposition said it was rising.

(i) _____

(ii) _____

(b) This department must reduce expenditure. It needs to install new computers.

(i) _____

(ii) _____

(c) Sales of the new car were poor. It was heavily advertised.

(i) _____

(ii) _____

7 Practice D

■ Finish the sentences in a suitable way.

(a) In contrast to America, where gun ownership is common, . . .

(b) Despite leaving school at the age of 14, . . .

(c) The majority displayed a positive attitude to the proposal, but . . .

(d) While the tutor insisted that the essay was easy, . . .

(e) Although the spring was cold and dry, . . .

UNIT 3.6

Numbers

Many students are required to write about statistical data clearly and accurately. This unit explains and practises the basic language of numbers and percentages, while presenting data in charts and tables is dealt with in [Unit 2.14](#) Visual Information.

1 The language of numbers

In introductions, numbers are often used to give an accurate account of a situation:

Approximately 1,800 children between the ages of 5 and 12 years were randomly selected.

The earth's atmosphere appears to be gaining 3.3 billion metric tons of carbon annually.

... but five winters in the twentieth century were more than 2.4° C colder than average.

Figures and **numbers** are both used to talk about statistical data in a general sense:

*The **figures/numbers** in the report need to be read critically.*

But **number** is used more widely:

*13 is an unlucky **number** in some cultures.*

*She forgot her mobile phone **number**.*

Digits are individual numbers:

4,539 – a four-**digit** number

Both **fractions** ($\frac{1}{2}$) and **decimals** (0.975) may be used.

There is no final 's' on hundred/thousand/million used with whole numbers:

Six million people live there.

but:

Thousands of people were forced to move from the area of the dam.

When writing about **currencies**, write \$440 m. (440 million dollars).

Rates are normally expressed as percentages (e.g. *the literacy rate rose to 75 per cent*), but may also be per thousand (e.g. *the Austrian birth rate is 8.7*).

It is normal to write whole numbers as words from one to ten and as digits above ten:

There were 16 students in the class, but only eight came to the lecture.

2 Percentages

These are commonly used for expressing rates of change:

Since 2008, the number of prisoners has risen by 22 per cent.

■ Complete the following sentences using the data in the table below.

- (a) Between 2010 and 2011, the number of overseas students increased by _____ per cent.
- (b) The number increased by _____ per cent the following year.
- (c) Between 2010 and 2013, there was a _____ per cent increase.

Overseas students in the university, 2010–2013

2010	2011	2012	2013
200	300	600	1,000

3 Simplification

Although the accurate use of numbers is vital, too many statistics can make texts difficult to read. If the actual number is not important, words such as **various**, **dozens** or **scores** may be used instead:

The snowstorm closed 47 schools.

The snowstorm closed dozens of schools.

few	less than expected
a few	approximately 3–6 depending on context
several	approximately 3–4
various	approximately 4–6
dozens of	approximately 30–60
scores of	approximately 60–100

- Rewrite the following sentences using one of the words or phrases in the table above.

Example: (a) Only three people attended the meeting.

Few people attended the meeting.

- (b) 77 students applied for the scholarship.
 (c) He rewrote the essay three times.
 (d) Last year, 38 books were published on biogenetics.
 (e) Five names were suggested, but rejected, for the new chocolate bar.
 (f) The students thought of four good topics for their project.

4 Further numerical phrases

The expressions listed below can also be used to present and simplify statistical information. For example:

The course fees rose from \$1,200 to \$2,500 in two years.

could be written:

The course fees doubled in two years.

If appropriate, **roughly/approximately** can be added:

The course fees roughly doubled in two years.

one in three	<i>One in three engineering students is from China.</i>
twice/three times as many	<i>Twice as many women as men study business law.</i>
a five/tenfold increase	<i>There was a fivefold increase in the price of oil.</i>
to double/halve	<i>The rate of infection halved after 2001.</i>
the highest/lowest	<i>The lowest rate of home ownership was in Germany.</i>
a quarter/fifth	<i>A fifth of all employees leave every year.</i>

the majority/minority	<i>The majority of births are in hospital.</i>
on average/the average	<i>On average, each judge hears two cases per day.</i>
a small/large proportion	<i>The website generates a large proportion of their sales.</i>

NB:	5–20 per cent	=	a tiny/small minority
	21–39 per cent	=	a minority
	40–49 per cent	=	a substantial/significant minority
	51–55 per cent	=	a small majority
	56–79 per cent	=	a majority
	80 per cent+	=	a large majority

■ Rewrite each sentence in a simpler way, using a suitable expression from the list above.

- (a) In 1975, a litre of petrol cost 12p, while the price is now £1.20.

- (b) Out of 18 students in the group, 12 were women.

- (c) The new high-speed train reduced the journey time to Madrid from seven hours to three hours 20 minutes.

- (d) The number of students applying for the Psychology course has risen from 350 last year to 525 this year.

- (e) Visitor numbers to the theme park show a steady increase. In 2007, there were 40,000 admissions, in 2008 82,000 and 171,000 in 2009.

- (f) More than 80 per cent of British students complete their first degree course; in Italy, the figure is just 35 per cent.

- (g) Tap water costs 0.07p per litre while bottled water costs, on average, 50p per litre.

- (h) The rate of unemployment ranges from 24 per cent in Spain to 3 per cent in Norway.

- (i) Seven out of every 100 computers produced had some kind of fault.

- (j) 57 per cent of the members supported the suggestion, but 83 per cent of these had some doubts.

5 Practice

- Study the data in the table below and write six sentences using suitable numerical phrases.

Selected Olympic Games, 1896–2008

Year	Host	Sports	Events	Athletes	% Women
1896	Athens	9	43	241	0.0
1924	Paris	17	126	3,089	4.4
1964	Tokyo	19	163	5,151	13.2
1992	Barcelona	32	257	9,356	28.9
2008	Beijing	28	302	10,942	42.4

- (a) *At the Paris Olympics in 1924, a small minority of athletes were female.*
- (b) _____
- (c) _____
- (d) _____
- (e) _____
- (f) _____
- (g) _____

UNIT 3.7

Prefixes and Suffixes

Prefixes and suffixes are the first and last parts of certain words. Understanding the meaning of prefixes and suffixes can help you work out the meaning of a word, and is particularly useful when you meet specialist new vocabulary.

1 How prefixes and suffixes work

‘Unsustainable’ is an example of a word containing a prefix and suffix. Words such as this are much easier to understand if you know how prefixes and suffixes affect word meaning.

Prefixes change or give the meaning.

Suffixes show the meaning or the word class (e.g. noun, verb).

Prefix	Meaning	STEM	Suffix	Word class/meaning
un-	negative	sustain	-able	adjective/ability

*The rate of growth was **unsustainable** (i.e. could not be continued).*

2 Prefixes

- (a) Negative prefixes: NON-, UN-, IN-, IM-, MIS-, DE- and DIS- often give adjectives and verbs a negative meaning: **n**onsense, **u**nclear, **i**ncapable, **i**mpossible, **m**ishear, **d**ecrease, **d**isagree.
- (b) A wide variety of prefixes define meaning, e.g. PRE- usually means ‘before’, hence **p**refer, **p**rehistory and, of course, **p**refix!

Common prefixes of meaning

- Find the meaning(s) of each prefix (NB: some prefixes have more than one meaning).

Prefix	Example	Example	Meaning
anti-	antidepressant	Antidepressant drugs are often overprescribed.	<i>against</i>
auto-	automatically	Over-18s automatically have the right to vote.	
co-	coordinator	The coordinator invited them to a meeting.	
ex-	ex-president	The ex-president gave a speech on climate change.	
ex-	exclusive	It is difficult to join such an exclusive club.	
fore-	forecast	The long-term forecast is for higher inflation.	
inter-	intervention	Early medical intervention saves lives.	
macro-	macroeconomics	Keynes focused on macroeconomics .	
micro-	microscope	She examined the tiny animals with a microscope .	
multi-	multinational	Ford is a multinational motor company.	
over-	oversleep	He missed the lecture as he overslept .	
poly-	polyglot	She was a true polyglot , speaking five languages.	
post-	postpone	The meeting is postponed until next Monday.	
re-	retrain	The firm retrained staff to use the new software.	
sub-	subtitle	Chinese films often have subtitles in the West.	
trans-	transmitter	Early radio transmitters were short-range.	
under-	undergraduate	Most undergraduate courses last three years.	
under-	undercook	Eating undercooked meat can be dangerous.	

3 Practice A

Prefixes allow new words to be created, e.g. 'unfriend' (to delete a 'friend' from social media).

■ Suggest possible meanings for the recently developed words in bold.

- (a) Criminal activity seems to be very common among the **underclass**.
- (b) The passengers found the plane was **overbooked** and had to wait for the next flight.
- (c) The **microclimate** in this district allows early vegetables to be grown.
- (d) It is claimed that computers have created a **post-industrial** economy.
- (e) Most film stars have **ex-directory** phone numbers.
- (f) The class was **underwhelmed** by the quality of the lecture.

4 Suffixes

- (a) Some suffixes such as -ION, -IVE or -LY help the reader find the word class (e.g. noun, verb or adjective).
- (b) Other suffixes add to meaning, e.g. -FUL or -LESS after an adjective have a positive or negative effect (thoughtful/careless).

Word class suffixes

Nouns	-ER often indicates a person: <i>teacher, gardener</i> -EE can show a person who is the subject: <i>employee, trainee</i> -ISM and -IST are often used with belief systems and their supporters: <i>socialism/socialist</i> -NESS converts an adjective into a noun: <i>sad/sadness</i> -ION changes a verb to a noun: <i>convert/conversion</i>
Adjectives	-IVE <i>effective, constructive</i> -AL <i>commercial, agricultural</i> -IOUS <i>precious, serious</i>
Verbs	-ISE/-IZE to form verbs from adjectives: <i>private/privatise</i> NB: In the USA, only -ize spelling is used, but both forms are accepted in the UK
Adverbs	-LY most (but not all) adverbs have this suffix: <i>happily</i>

Meaning suffixes

A few suffixes contribute to the meaning of the word:

- ABLE has the meaning of ‘ability’: *a watchable film, changeable weather*
- WARDS means ‘in the direction of’: *the ship sailed northwards*
- FUL and -LESS: **hopeful** news, a **leaderless** team

5 Practice B

■ Give the word class and suggest possible meanings for:

- (a) cancellation
- (b) coincidental
- (c) uncooperatively
- (d) evolutionary
- (e) protester
- (f) unpredictable
- (g) saleable
- (h) interviewee
- (i) consumerism
- (j) symbolically

6 Practice C

■ Study each sentence and find the meaning of the words underlined.

- (a) The film is an Anglo-Italian co-production made by a subsidiary company.
- (b) When the car crashed, she screamed involuntarily but was unharmed.
- (c) Using rechargeable batteries has undoubted benefits for the environment.
- (d) The unavailability of the product is due to the exceptional weather.
- (e) The miscommunication led to a reorganisation of their software system.

► See [Unit 3.3 Academic Vocabulary: Nouns and Adjectives](#)

UNIT
3.8

Prepositions

Prepositions are generally short words such as ‘by’ or ‘at’, which have a variety of uses. They are important because different prepositions can change the meaning of a sentence. This unit explains how they can be understood, linking them to nouns, adjectives and verbs. Students should consult a standard English grammar for a full list of prepositional combinations.

1 Using prepositions

- Underline the prepositions in the following text (ignoring to + infinitives).

The purpose of this paper is to examine the development of the textile industry in Catalonia over the period 1780–1880. This clearly contributed to the region’s industrialisation, and was valuable for stimulating exports. In conclusion, the paper sets out to demonstrate the relationship between the decline in agricultural employment and the supply of cheap labour in the factory context.

- The following list gives the main ways of using prepositions. Find one example of each in the text.

Noun + preposition

purpose of

Verb + preposition

Adjective + preposition

Phrasal verb

Preposition of place

Preposition of time _____

Phrase _____

Note the difference between phrasal verbs and verbs with prepositions:

The cars are made in Korea. (verb + preposition = easy to understand)

The researcher made up some of his data. (phrasal verb = harder to understand)

2 Practice A

■ Study these further examples of preposition use and decide on their type.

- (a) There are a number **of** limitations to be considered . . . (noun +)
- (b) The results would be applicable **to** all children . . . (_____)
- (c) . . . the data was gathered **from** a questionnaire (_____)
- (d) All the items were placed **within** their categories (_____)
- (e) The results **of** the investigation are still pertinent . . . (_____)
- (f) The respondents had spent **on** average 4.9 years . . . (_____)
- (g) . . . most countries **in** sub-Saharan Africa . . . (_____)
- (h) . . . **within** a short spell of four years . . . (_____)

3 Prepositions and nouns

■ Insert a suitable preposition before or after the nouns in the sentences below.

- (a) Evidence is presented in support _____ the value of women's work.
- (b) A small change _____ wind direction can lead to large temperature changes.
- (c) Many examples _____ tax evasion were found.
- (d) The answer _____ the problem was 0.585.
- (e) Globalisation, _____ a political sense, involves a loss of national authority.
- (f) The second point is their impact _____ developing countries.

4 Prepositions in phrases

- Complete the following phrases with the correct preposition.

- (a) _____ the whole
- (b) point _____ view
- (c) in respect _____
- (d) _____ spite of
- (e) in support _____
- (f) _____ the other hand
- (g) _____ order to
- (h) standard _____ living

5 Prepositions of place and time

Note the difference between ‘among’ and ‘between’:

Among 14 students in the class, only two were from Africa. (large group)

He divided his time *between* the offices in Barcelona and Madrid. (limited number)

- Complete the following sentences with suitable prepositions of place or time.

- (a) _____ the respondents, few had any experience of working abroad.
- (b) The illiteracy rate declined gradually _____ 1976 _____ 1985.
- (c) Most workers _____ the European Union retire before the age _____ 60.
- (d) Leonardo da Vinci was born _____ Florence _____ 1452.
- (e) Chocolate sales fall _____ summer and peak _____ Christmas.
- (f) _____ the surface, there is no difference _____ male and female responses.
- (g) The countries _____ the Mediterranean held a meeting _____ May 20th.

6 Practice B

■ Complete the following text with suitable prepositions.

This study sets (a) _____ to answer the controversial question (b) _____ whether increased food supply (c) _____ a country makes a significant contribution (d) _____ reducing malnutrition (e) _____ children. It uses data collected (f) _____ 75 countries (g) _____ 1995 and 2005. The findings are that there was a considerable improvement (h) _____ the majority (i) _____ countries, despite increases in population (j) _____ the period. However, a clear distinction was found (k) _____ the poorest countries (e.g. (l) _____ South Asia), where the improvement was greatest, and the wealthier states such as those (m) _____ North Africa. Other factors, notably the educational level (n) _____ women, were also found to be critical (o) _____ improving childhood nutrition.

7 Verbs and prepositions

The following verbs are generally used with these prepositions:

<i>Verb + preposition</i>	<i>Example</i>
add to	The bad weather added to the team's difficulties.
agree with	Yu (1997) agrees with Martin and Jenks (1989).
associate with	Monetarism is an economic policy associated with Mrs Thatcher.
believe in	The survey showed that 65 per cent believed in life after death.
blame for	He blamed unfair questions for his poor exam results.
concentrate on (also: focus on)	She dropped all her hobbies to concentrate on her work.
consist of	Parliament consists of two Houses: the Commons and the Lords.
depend of (also: rely on)	The company depends on IT for a rapid flow of sales data.
derive from	Modern computers derive from wartime decoding machines.

divide into	Trees are divided into two main types: conifers and deciduous.
invest in	Far more money needs to be invested in primary education.
learn from	All successful students learn from their mistakes.
pay for	Goods delivered in April must be paid for by 30 June.
point out	Goodson (2001) points out the dangers of generalisation.
specialise in	This department specialises in French poetry.

8 Practice C

■ Complete the following with suitable verbs and prepositions.

- (a) The enquiry _____ the cause of the accident, not the consequences.
- (b) Dr Cracknell _____ that there were only two weeks before the deadline.
- (c) Fewer British students are _____ foreign languages.
- (d) The theory of relativity will always be _____ Albert Einstein.
- (e) A football pitch is _____ two halves.
- (f) A series of strikes were _____ the decline in production during May.
- (g) Millions of men died for the cause they _____.

UNIT 3.9

Synonyms

Synonyms are different words with a similar meaning. A good writer uses them to avoid repetition and thus provide more interest for the reader. Synonyms should also be used when paraphrasing or note-making to avoid plagiarism.

1 How synonyms work

- Underline the synonyms in the following text and complete the table.

Royal Dutch Shell is the **largest** oil company in the world by revenue, with a significant share of the global hydrocarbon market. The **giant** firm employs over 100,000 people internationally, including over 8,000 employees in Britain.

Word/phrase	Synonym
largest	<i>giant</i>
oil	
company	
in the world	
people	

- (a) Synonyms are not always exactly the same in meaning, and it is important not to change the register. ‘Firm’ is a good synonym for ‘company’, but ‘boss’ is too informal to use for ‘manager’.
- (b) Many common words (e.g. culture, economy or industry) have no effective synonyms.

2 Common synonyms in academic writing

■ Match the academic synonyms in each list.

Nouns		Verbs	
area	advantage	accelerate	change
authority	part	alter	help
behaviour	argument	analyse	question
benefit	disadvantage	assist	explain
category	tendency	attach	evolve
component	field	challenge	examine
controversy	source	clarify	establish
drawback	emotion	concentrate on	insist
expansion	target	confine	speed up
feeling	explanation	develop	take apart
framework	conduct	evaluate	join
goal	topic	found	decrease
interpretation	possibility	maintain	demonstrate
issue	production	predict	increase
method	research	prohibit	cite
option	increase	quote	reinforce
quotation	citation	raise	focus on
results	figures	reduce	forecast
statistics	type	respond	ban
study	structure	retain	limit
trend	system	show	keep
output	findings	strengthen	reply

NB: These pairs are commonly synonymous, but not in every situation.

3 Practice A

- Find synonyms for the words and phrases underlined, rewriting the sentences where necessary.

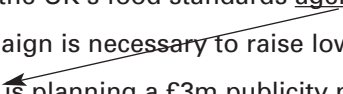
- (a) Professor Hicks questioned the findings of the research.
- (b) The statistics show a steady increase in student numbers.
- (c) The institute's prediction has caused a major controversy.
- (d) Cost seems to be the leading drawback to that system.
- (e) They will concentrate on the first option.
- (f) After the lecture, she tried to clarify her concept.
- (g) Three issues need to be examined.
- (h) The framework can be retained, but the goal needs to be altered.
- (i) OPEC, the oil producers' cartel, is to cut production to raise global prices.
- (j) The trend to smaller families has speeded up in the last decade.

4 Practice B

- Identify the synonyms in this text by underlining them and linking them to the word they are substituting for.

Example: agency – organisation

The chairman of the UK's food standards agency has said that a national advertising campaign is necessary to raise low levels of personal hygiene.

The organisation  is planning a £3m publicity programme to improve British eating habits. A survey has shown that half the population do not wash before eating, and one in five fail to wash before preparing food. There are over 6 million cases of food poisoning in this country every year, and the advertising blitz aims to cut this by 20 per cent. This reduction, the food body believes, could be achieved by regular hand washing prior to meals.

5 Practice C

- In the following text, replace all the words or phrases in bold type with suitable synonyms.

Many motor manufacturers are currently introducing electric cars. Their aim is to **manufacture cars** which are cheaper to run and less polluting. But these **motor manufacturers** face several key difficulties. One **key difficulty** is the limited range of the battery, while another **difficulty** is its cost and weight. But the **motor manufacturers** predict that these **difficulties** will soon be overcome and **predict** that 10 per cent of cars will be powered by electricity in five years' time.

UNIT
3.10

Time Markers

Words such as ‘during’ and ‘since’ are often used to explain the timing of events. But the application of some of these words is restricted to particular tenses. This unit explains and practises their use.

1 How time markers are used

■ Study the following:

She went on a training course **for** six weeks.

(with numbers, without start date)

The report must be finished **by** 12 June.

(on or before)

He has been president **since** 2007.

(with present perfect, must specify start date)

They are studying in Bristol **until** March.

(end of a period)

The library was opened two years **ago**.

(usually with past)

The hotel is closed **during** the winter.

(with noun)

Before writing, he studied over 100 sources.

(often followed by -ing form; *also* **after**)

He applied in May and was accepted two months **later**.

(often used with numbers; *also* **earlier**)

2 Tenses

- Compare the tenses used with the following time markers:

Last year there was an election in Spain.	(past – finished event)
In the last year there has been a decline in inflation.	(present perfect – unfinished)
Recently , there has been a sharp rise in Internet use.	(present perfect – unfinished)
Currently , there is widespread concern about plagiarism.	(present – focus on now)

3 Practice A

- Choose the best alternative in each case.
 - (a) Currently/recently she has been researching the life cycle of a Brazilian wasp.
 - (b) He worked there until/during he retired.
 - (c) Dr Hoffman has lived in Melbourne since/for 16 years.
 - (d) Last month/in the last month a new book was published on genetics.
 - (e) Applications must be received by/on November 25th.
 - (f) Since/during her arrival last May she has reorganised the department.
 - (g) During/for the winter most farmers in the region find work in the towns.

4 Practice B

- Study the schedule for Professor Wang's recent trip and complete the sentences opposite with a suitable word. It is now 16 April.

12 March	Fly London – Barcelona
13–14 March	Conference in Barcelona
15 March	Train Barcelona – Paris
16 March	Lecture visit to Sorbonne
17 March	Fly Paris – Shanghai
18–19 March	Meeting with colleagues
20 March	Fly Shanghai – London

- (a) _____ month Professor Wang made a lengthy trip.
(b) _____ her trip she visited three countries.
(c) _____ 18 March she had travelled 11,000 kilometres.
(d) She was away from home _____ nine days altogether.
(e) A month _____ she was in Paris.
(f) Two days _____ she was in Shanghai.
(g) She stayed in Shanghai _____ 20 March.
(h) _____ she is writing a report on her trip.

5 Practice C

- Complete each gap in the following text with a suitable word.

Eating Out

(a) _____ the last few decades there has been a significant change in eating habits in the UK. (b) _____ the early 1980s eating out in restaurants and cafes has increased steadily. There are several reasons for this trend.

50 years (c) _____ most women were housewives, and cooked for their families every day. But (d) _____, with more women working outside the home, less time has been available for food preparation. (e) _____, 71 per cent of women aged 20–45 are at work, and (f) _____ 2020 it is estimated that this will rise to 85 per cent.

Another factor is the growth in disposable income, which has risen significantly (g) _____ the late 1970s. With more money in their pockets people are more likely to save the trouble of shopping and cooking by visiting their local restaurant.

6 Practice D

- Study the details of Napoleon's life, and write a short biography.

1769	Born in Corsica
1784	Entered military school in Paris
1789	French revolution started
1793	Promoted to brigadier general
1796	Appointed to command army of Italy; married Josephine
1799	Returned from Egypt and became First Consul of France
1807	France controlled most of continental Europe
1810	Divorced Josephine and married Marie-Louise, daughter of Austrian emperor
1812	Forced to retreat from Russia
1814	Exiled to island of Elba
1814	Defeated at battle of Waterloo and exiled to island of St Helena
1821	Died in exile

Napoleon

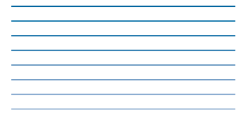
Napoleon entered military school at the age of 15, ...



Writing Models

PART

4



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UNIT 4.1

Case Studies

Both essays and reports may include case studies, which are detailed examples. One case study may be the main subject of an essay, or several may be included to illustrate different situations.

1 Using case studies

A case study attempts to show exactly what happened in a particular situation. For example, if you are discussing methods of fighting malaria in rural areas, a case study might follow the real-life efforts of a medical team in a specific district of Indonesia over a period of months.

What are the advantages of including case studies?

Is there a disadvantage?

■ Match the topics on the left with the case studies on the right.

Topics	Case studies
Methods of teaching dyslexic children	A program to cut smoking among pregnant women in a Greek clinic
Improving crop yields in semi-deserts	Working and learning – how a Brazilian scheme encouraged convicts to stay out of jail
Reducing infant mortality	The Berlin experiment: increasing public participation in collecting and sorting waste
Building earthquake-resistant bridges	Using solar power to operate irrigation pumps in Ethiopia
Dealing with reoffending among prisoners	The lessons from Chile – how three structures withstood the 2010 quake
Improving recycling rates in large cities	An experimental approach to reading difficulties with under-8s in Singapore

2 Model case study

- Read the following example and answer the questions below.

Topic: Adapting international brands to local markets

Case Study: The experience of IKEA in China

Introduction

The Chinese economy has expanded at an annual rate of over 8 per cent for the past 30 years. Parallel to this, the Chinese furniture industry has grown vigorously, with annual sales recently rising by over 20 per cent a year. Legislation to privatise home ownership and rapidly rising income levels have created unprecedented growth in the home improvement market. According to estimates from the Credit Suisse group, China will be the world's second largest furniture market by 2014. This demand has boosted domestic production and also prompted international furniture manufacturers to enter this lucrative market.

IKEA, a Swedish furniture company, was one of the international companies to move into China. It is a major furniture retailer operating in over 40 countries around the world and has annual sales of over 21 billion euros (IKEA website). It entered the Chinese market in 1998 with its first store in Beijing, and sees great potential in the country, having already expanded to ten stores and five distribution centres. Despite this successful growth, IKEA has found itself facing a number of challenges in terms of local differences in culture and business practices.

Marketing IKEA in China

Marketing management needs to be largely tailored to local contexts. IKEA has kept this notion in mind when designing marketing strategies and trying to appeal to local customers while maintaining profitability. The company attempts to find the best possible compromise between standardization and adaptation to the local markets. Its product policy pays careful attention to Chinese style and integrates the set of product attributes effectively (Armstrong and Kotler, 2006).

The store layouts reflect the floor plan of many Chinese apartments, and since many of these have balconies, the stores include a balcony section. In contrast with traditional Chinese furniture, which is dark with much carving, IKEA introduces a lighter and simpler style. However, efforts have been made to adapt its products to Chinese taste. For instance, it has released a series of products just before each

Chinese New Year. In 2008, the year of the rat, the series 'Fabler' was designed, using the colour red which is associated with good luck.

Changes were also made to some product ranges. In Sweden, people are used to sleeping in single beds, or to putting two single beds together to form a double bed. However, this idea was not very well received by Chinese couples, due to the fact that sleeping in separate beds symbolizes a poor relationship and is believed to bring bad luck. In addition, Chinese brand names should have positive connotations. The Chinese name of IKEA (Yi Jia) means 'comfortable home', which gives the company a useful advantage in the market.

An important feature of a retailer is the services it offers. The Shanghai store, for instance, has a children's playground and a large restaurant, which make it distinctive. However, Chinese consumers expect free delivery and installation, and although IKEA has reduced its charges for these, it still compares unfavourably with its competitors.

Price

When the company first entered China its target market was couples with an income of 5–8,000 Rmb per month. Following steady price reductions this has now been lowered to families with just over 3,000 Rmb. Various strategies have been adopted to achieve these reductions; the most effective being to source locally. Seventy per cent of its products sold in China are now made in the country (Song, 2005). Furthermore, IKEA replaced its thick, annual catalogue with thinner brochures which now appear five times a year. These not only cut printing costs but also give greater flexibility to adjust prices.

Accessibility is also an important issue for the Chinese market. In most countries IKEA stores are sited near main roads, but as only 20 per cent of likely customers own cars in China, easy access to public transport is vital (Miller, 2004).

Advertising plays an important role in the total promotional mix. IKEA uses advertising effectively, with adverts in the local newspapers to keep customers informed of special offers. All TV commercials are produced locally with Chinese characters. Public relations is also vital to building a good corporate image. In China, IKEA co-operates with the Worldwide Fund for Nature (WWF) on forest projects. The company insists on using environmentally friendly and recyclable materials for the packaging of their products, as part of their efforts to build a good corporate image.

Discussion and Conclusion

IKEA's product policy in China has been to successfully standardise products as much as possible, but also customise as much as needed. But it has learned that service is also vital: free delivery and installation are the perceived rules in the local market which it needs to follow. It has further found that it is better to locate in a downtown area, easily accessible with public transport, when free delivery is not provided.

International companies that operate in China, such as IKEA, face more complicated marketing decisions than local companies. They must become culture-conscious and thoroughly research local requirements rather than simply introduce a standard model of business.

- (a) What has IKEA done to adapt to the Chinese market?
- (b) Give examples of problems the company has faced in this market.
- (c) What could be done to improve the case study?

UNIT 4.2

Literature Reviews and Book Reviews

Literature reviews are sections of a paper in which the writer summarises recently published work on the topic. They are standard in dissertations, but in most papers a summary of relevant and recent authorities is included in the introduction.

Book reviews may be written by graduate students for academic journals in order to broaden their knowledge and achieve publication.

1 Literature reviews

Occasionally, the whole focus of an essay may be a lengthy literature review, but in most student writing it will only form a relatively short section of the paper. Only a minority have a separate section headed 'The Literature' or 'Literature Review'. In all cases, it is necessary to show that you are familiar with the main sources, so that your writing can build on these.

A literature review is not simply a list of sources that you have studied. It can be used to show that there is a gap in the research that your work attempts to fill:

This article has a different standpoint from other studies, because it believes that the influence of the state on the market has structurally increased since the neo-liberal era.

This article focuses on information production, not information accessibility. That is the difference between this research and previous studies . . .

It is also common to use the literature section to clarify the varying positions held by other researchers:

The political competition literature comprises two main strands – voter monitoring and political survival.

Writers may also show how changes in thought have appeared at different times:

Of late, a number of papers (Besley et al., 2006; Besley and Preston, 2007; Persson and Tabellini, 2000) have collated the various arguments . . .

► See [Unit 1.9](#) Combining Sources

2 Example literature review

- Study the following example, from a student essay on motivation theory. Answer the questions that follow.

CONTENT AND PROCESS THEORIES

The various theories of motivation are usually divided into content theories and process theories. The former attempt to 'develop an understanding of fundamental human needs' (Cooper *et al.*, 1992: 20). Among the most significant are Maslow's hierarchy of needs theory, McClellan's achievement theory and Herzberg's two-factor theory. The process theories deal with the actual methods of motivating workers, and include the work of Vroom, Locke and Adams.

Content Theories

Maslow's hierarchy of needs theory was first published in 1943 and envisages a pyramid of needs on five levels, each of which has to be satisfied before moving up to the next level. The first level is physiological needs such as food and drink, followed by security, love, esteem and self-fulfilment (Rollinson, 2005: 195–196). This theory was later revised by Alderfer, who reduced the needs to three: existence, relatedness and growth, and re-named it the ERG theory. In addition, he suggested that all three needs should be addressed simultaneously (Steers *et al.*, 2004: 381). McClelland had a slightly different emphasis when he argued that individuals were primarily motivated by three principal needs: for achievement, affiliation and power (Mullins, 2006: 199).

In contrast, Herzberg suggested, on the basis of multiple interviews with engineers and accountants during the 1950s, a two-factor theory: that job satisfaction and dissatisfaction had differing roots. He claimed that so-called hygiene factors such as conditions and pay were likely to cause negative attitudes if inadequate, while positive attitudes came from the nature of the job itself. In other words, workers were satisfied if they found their work intrinsically interesting, but would not be

motivated to work harder merely by good salaries or holiday allowances. Instead workers needed to be given more responsibility, more authority or more challenging tasks to perform (Vroom and Deci, 1992: 252). Herzberg's work has probably been the most influential of all the theories in this field, and is still widely used today, despite being the subject of some criticism, which will be considered later.

Process Theories

Vroom's expectancy theory hypothesises a link between effort, performance and motivation. It is based on the idea that an employee believes that increased effort will result in improved performance. This requires a belief that the individual will be supported by the organisation in terms of training and resources (Mullins, 2006). In contrast, Locke emphasised the importance of setting clear targets to improve worker performance in his goal theory. Setting challenging but realistic goals is necessary for increasing employee motivation: 'goal specificity, goal difficulty and goal commitment each served to enhance task performance' (Steers *et al.*, 2004: 382). This theory has implications for the design and conduct of staff appraisal systems and for management by objective methods focusing on the achievement of agreed performance targets.

Another approach was developed by Adams in his theory of equity, based on the concept that people value fairness. He argued that employees appreciate being treated in a transparently equitable manner in comparison with other workers doing similar functions, and respond positively if this is made apparent (Mullins, 2006). This approach takes a wider view of the workplace situation than some other theories, and stresses the balance each worker calculates between 'inputs', i.e. the effort made, and 'outputs', which are the rewards obtained.

- (a) How many types of motivation theory are described?
- (b) How many different theorists are mentioned?
- (c) How many sources are cited?
- (d) Why has the writer not referred to the work of the theorists directly but used secondary sources instead?

3 Book reviews

Writing a book review gives a student the opportunity to critically examine a topic in detail. Journals normally specify the length they require (often about 400 words). In general, a review should contain two parts:

- (a) A description of the scope and organisation of the book. Who is the author, and what has he or she written before? What kind of reader is the book aimed at? In the case of an edited volume, who are the editors and principal contributors?
- (b) The **second part** should evaluate how successful the book is in its aims. It is better to avoid excessive praise or criticism, and to mention both positive and negative features. Is the book breaking new ground and adding significantly to current debates? It is also worth commenting on the author's style, and how easy it is to read for specialist or non-specialist readers.

Writers are recommended to first read a selection of reviews in their subject area before attempting their own.

4 Model book review

- Study the following review and discuss with a partner whether there is anything else that you think the reviewer should have included.

Atlantic Crossing: A Comparison of European and American Society

by Marcus Montero (ed.) York: York University Press, 2008. 378 pp., £35.00, ISBN 987-0-15-980456-3

This useful and important edited volume partly fills a gap in the comparative political science literature. The book compares the society and politics of the European Union (treated here as a single state) with the United States. The book examines 'convergences and divergences' between these two global powers, similar in size and economic weight 'but asymmetric in terms of political influence and military might' (p. 1).

The book has eight chapters. The introductory and concluding chapters, which hold the volume together, are written by the editor. The first briefly outlines the adopted comparative approach and methodological challenges faced in producing this study. Montero then goes on to argue that the EU and the US offer two contrasting models of Western modernity. The final chapter argues that the process of constructing the EU has led to convergence, not divergence, between the EU and the US. In between

are six sectoral chapters; of particular interest is the third, by Kuhl, which argues that the *quality* of the democratic experience is in decline on both sides of the Atlantic.

This is a well-written work that breaks new ground in treating the EU as a single state. However, the book was published in 2008, a year after the EU had enlarged to 27 states. The authors fail to deal fully with this 'geographic boundary' problem. This neglect of the newest member states is repeated throughout the volume and brings into question the validity of the book's wider conclusions.

UNIT
4.3

Writing Longer Essays



Long essays of 2,500–5,000 words may be required as part of a module assessment. These require more research and organisation than short essays, and this unit provides a guide to how such an assignment can be tackled.

1 Planning your work

Longer assignments are normally set many weeks before their deadline, which means that students should have plenty of time to organise their writing. However, it is worth remembering that at the end of a semester, you may have to complete several writing tasks, so it may be a good idea to finish one earlier.

You should also check the submission requirements of your department. These include style of referencing, method of submission (i.e. electronic, hard copy or both) and place and time of submission. Being clear about these will avoid last-minute panic.

- (a) The first thing is to prepare a schedule for your work. An eight-week schedule might look like this:

Week	Stages of Work	Relevant Units in <i>Academic Writing</i>
1	Study title and make first outline. Look for and evaluate suitable sources.	1.5
2	Reading and note-making. Keep record of all sources used.	1.2, 1.3, 1.6, 1.8
3	Reading, note-making, paraphrasing and summarising. Modify outline.	1.2, 1.3, 1.5, 1.7

Week	Stages of Work	Relevant Units in <i>Academic Writing</i>
4	Write draft of main body.	1.10
5	Write draft introduction and conclusion.	1.11
6	Rewrite introduction, main body and conclusion, checking for logical development of ideas and relevance to title.	1.12
7	Organise list of references, contents, list of figures and appendices if required. Check all in-text citations.	1.8
8	Proofread the whole essay before handing it in. Make sure that the overall presentation is clear and accurate.	1.12

(b) How you actually plan your schedule is up to you, but the important thing is to organise your time effectively. Leaving the writing stage until the last minute will not lead to a good mark, however much research you have done. Although you may be tempted to postpone writing, the sooner you start the sooner you will be able to begin refining your ideas. Remember that late submission of coursework is usually penalised.

(c) Longer papers may include the following features, in this order:

Title page	Apart from the title, this usually shows the student's name, module title and number.
Content page	This should show the reader the basic organisation of the essay, with page numbers.
List of tables or figures	If the essay includes visual features such as graphs, these need to be listed by title and page number.
Introduction	
Main body	If a numbering system is used, the chief sections of the main body are normally numbered 1, 2, 3 and then subdivided 1.1, 1.2, etc.
Conclusion	
List of references	This is a complete list of all the sources cited in the text. Writers occasionally also include a bibliography, which is a list of sources read but not cited.
Appendices (singular – appendix)	These sections are for data related to the topic that the reader may want to refer to. Each appendix should have a title and be mentioned in the main body.

2 Example essay

- Read the following essay on the topic of nuclear energy. In pairs or groups, discuss the following points:

- (a) What is the writer's position on this issue?
- (b) How does the writer make his or her position clear?

EVALUATE THE RISKS OF USING NUCLEAR ENERGY AS AN ALTERNATIVE TO FOSSIL FUELS

Introduction

The search for sources of energy began when humans first started to burn wood or other forms of biomass to generate heat for cooking and smelting. This was followed by using hydropower from rivers and harnessing wind energy with windmills. Later the exploitation of chemical energy began with the burning of coal, oil and natural gas. Then, in the middle of the twentieth century, nuclear energy appeared for the first time, with the hope that it would allow the efficient production of cheap, clean energy (Bodansky, 2004).

Nuclear energy has, however, become the subject of considerable debate, with its proponents claiming that it is beneficial for the environment, since its production does not create carbon dioxide (CO₂) which can lead to global warming. However, its opponents argue that it can damage the environment by creating radioactive waste. It is also linked to diseases in humans, and there is the additional fear that it may be abused by terrorists in future. These critics further argue that other energy sources, such as solar power, could constitute safer alternatives to fossil fuels without posing an environmental threat.

This essay attempts to assess the risks of using nuclear power, in comparison with other sources of energy. The main arguments for employing nuclear energy are first considered, followed by an examination of the safety issues around this source of power, including the safety and security concerns connected with nuclear waste.

1 Reasons for Using Nuclear Energy

1.1 An Alternative Source of Energy

The rationale behind using nuclear energy stems from the need to find alternative energy sources to fossil fuels (i.e. oil, gas and coal), which are finite. This is a

growing concern, due to the increase in the global population, which is accompanied by an increase in energy demand. Mathew (2006) indicates that the annual energy consumption rate per capita in developed countries is between 4,000 and 9,000 kg of oil, while the rate in less developed countries is around 500 kg. As a result, the demand for total primary energy, which will accompany the population growth, is projected to increase from 12.1 Mtoe (million tons of oil equivalent) to 16.1 Mtoe in 2030. If this increase occurs the total global stock of oil and gas would only be adequate for 250 years, thus requiring the urgent development of other energy sources, which would not deplete the stock of natural resources available for future generations.

1.2 Limitations of Other Energy Sources

Wind energy and solar power are frequently presented as alternative energy sources to fossil fuels. Both are freely available in many parts of the world and their use involves no CO₂ emissions. Sterrett (1994) claims that sufficient wind energy exists to displace approximately eight billion barrels of oil. However, wind energy is unreliable, as wind turbines do not function if the wind speed is too high or low. Similarly, solar power is only effective during the day, and is uneconomic in cool and cloudy climates. Neither of these sources currently offers an efficient and reliable alternative to energy created from fossil fuels.

1.3 Reducing Carbon Dioxide Emissions

An important reason for using nuclear energy is to reduce the emissions of CO₂, which are produced by burning fossil fuels. Bodansky (2004) points out that this type of fuel is the main source of the increase in atmospheric carbon dioxide. The amount of CO₂ produced by each source differs due to the differences in their hydrogen content. For example, natural gas contains one carbon atom and four hydrogen atoms, which combine with oxygen to produce CO₂. The proportion of CO₂ is lower than with the other sources, because the emission depends on the mass of carbon inside the chemical compounds. Although natural gas is thus cleaner than the alternatives, burning all three fuels contributes to the greenhouse effect which is causing the earth to heat up.

Nuclear energy, however, emits no carbon dioxide, sulphur dioxide (SO₂) or nitrous oxide (NO_x). It is estimated that in 2003, in the USA, nuclear energy prevented the release of 680 million tons of CO₂, 3.4 millions tons of SO₂ and 1.3 million tons of NO_x. If released from coal burning plants, these gases would have caused the deaths of 40,000 people annually (Olah *et al.*, 2006: 127). According to Richard (2008: 273) the use of nuclear energy in France between 1980 and 1987 reduced CO₂ emissions by 34 per cent.

1.4 Cost Efficiency

Nuclear energy could potentially generate more electricity than other current sources. As Murray (2000: 73) explains, a typical reactor, which consumes 4 kg/day of uranium U235, generates 3,000 MW of energy a day, while other sources such as natural gas, coal or oil require many times the equivalent of that amount of uranium to generate the same energy. Therefore nuclear energy is relatively cost efficient as it uses a cheap raw material.

In recent years the price of oil and natural gas has risen sharply, and this trend seems likely to continue in future. Lillington (2004) suggests that the cost of purchasing fuel for nuclear energy is likely to remain low compared to other energy sources, so it seems likely that this cost advantage will become a significant factor in the comparison between nuclear and other energy sources.

2 Health and Safety Concerns

2.1 The Impact of Radiation on the Human Body

Especially since the Chernobyl accident in 1986 there has been persistent concern about the dangers to human health from nuclear power and nuclear waste. However, it must be understood that nuclear energy is not the only source of radiation, and that there are natural sources in the environment which may be more significant. According to Bodansky (2004: 74) there is far more exposure to radiation from natural sources such as radon and cosmic rays than from all human sources, for example X-rays and nuclear medicine.

Some researchers argue that radon is one of the main causes of cancer diseases among uranium miners. However, radon may be found in all types of soil which contain uranium and radium. Bodansky (2004) points out that the concentration of radon in the soil depends on the type of soil. Hence people's exposure to radon depends on their surroundings, so that people living in houses made from limestone or wood are exposed to less radon than those living in houses built with granite. So it seems that it is not only uranium miners who are exposed to radiation, but also people in certain geological districts.

According to US law the maximum permissible exposure for those living close to nuclear plants is 1/200 rem. However, according to Hoyle (1979) this amount is just 1/20th of the radiation that can be experienced from natural background radiation. It has been estimated that nuclear energy is responsible for just 20 deaths per year worldwide, although these figures are disputed by anti-nuclear campaigners who claim that the true figure is as high as 600 deaths. Hoyle (*ibid.*) claims that the

average American's life-span is reduced by 1.2 hours as a result of nuclear accidents, and contrasts that with the risk from smoking, which is a loss of eight years if one packet a day is smoked. Consequently, it can be seen that the risk to human health from the use of nuclear power is extremely low.

With regard to medical treatment, which is the next largest source of exposure to radiation, X-rays will expose a patient to radiation amounts from 0.4 to 1 rad (radiation absorbed dose). A broken wrist, for instance, is likely to require 4 X-rays with a total exposure of up to 4 rads. The unit of measurement for radiation exposure is the rem, and one rem is equal to the damage caused by 1 rad of X-rays; the maximum amount allowed for workers in nuclear plants is 5 rem per year: the same as the quantity received in the course of a routine medical check-up.

2.2 The Impact of Radioactive Waste on the Environment

Nuclear energy is not alone in producing dangerous waste. Lillington (2004) estimates that nuclear energy, in the course of producing 1,000 megawatts (MWe) of electricity produces annually about 30 tons of highly radioactive waste and about 800 tons of intermediate and low-level waste. In contrast, a coal-burning plant producing the same quantity of electricity would generate about 320,000 tons of coal ash, of which nearly 400 tons would be hazardous waste such as mercury and vanadium, and at least 44,000 tons of sulphur dioxide. So it can be seen that nuclear energy only produces a fraction of the dangerous wastes emitted from coal-fired power stations, and in addition does not produce greenhouse gases.

2.3 Risks of Terrorism

There has been widespread concern that terrorists might steal plutonium to produce nuclear weapons. In general nuclear facilities are tightly controlled, and in practice, it would be very difficult for terrorists to use such stolen material effectively. There are alternative materials such as toxic gas which could produce equally lethal terrorist weapons. However, these concerns could be solved by keeping U233 mixed with U238, which would prevent terrorist groups extracting the plutonium and fabricating a bomb.

Conclusion

The risks of nuclear energy in terms of both human health and the environment have been the subject of widespread debate and controversy. This essay has attempted to examine these risks both in terms of human health and environmental damage. It appears that many of these concerns are exaggerated, and that nuclear

energy can be seen as a safe, reliable and cost-effective alternative to using fossil fuels.

While all energy sources have drawbacks, nuclear should be viewed as a useful and relatively safe component in a mix of sources which can include renewables such as hydro and wind energy and non-renewables such as natural gas. The steady depletion of reserves of oil and the subsequent rise in prices is liable to emphasise this position. Clearly more could be done to make nuclear plants safer and more efficient in future, but until their value is recognised and more work is done on their design and construction their full potential is unlikely to be realised.

References

- Bodansky, D. (2004) *Nuclear Energy: Principles, Practices and Prospects*. New York: Springer.
- Hoyle, F. (1979) *Energy or Extinction?* London: Heinemann.
- Lillington, J. N. (2004) *The Future of Nuclear Power*. Oxford: Elsevier.
- Mathew, S. (2006) *Wind Energy: Fundamentals, Resource Analysis and Economics*. Berlin: Springer.
- Murray, L. R. (2009) *Nuclear Energy. An Introduction to the Concepts, System and Application of the Nuclear Process*. Oxford: Butterworth.
- Olah, A. G., Goeppert, A. and Parakash, S. (2006) *Beyond Oil and Gas: The Methanol Economy*. Weinheim: Wiley.
- Sterrett, T. (1994) *The Energy Dilemma*. London: Multivox.

3 Revision

■ Look back at the text and find examples of the following features:

- | | |
|--|--|
| (a) Background information | (i) A synonym for 'energy' |
| (b) A purpose statement | (j) An example of tentative or cautious language |
| (c) An outline | (k) An example to support the writer's argument |
| (d) A definition | (l) A counterargument |
| (e) A generalisation | (m) A citation |
| (f) The use of brackets to give extra detail | (n) A synopsis |
| (g) A passive structure | |
| (h) A phrase showing cause and effect | |

NB: Formatting of written assignments

Some departments may expect essays to be written in the style illustrated above, with numbered section and headings, while others may require essays to be written without these. It is important to check with your teachers what the preferred style is.

UNIT 4.4

Reports

Although essays are the most common assignments in many academic disciplines, students of science and business are often asked to write reports. Reports and essays are similar in many ways – this unit explains and illustrates the differences.

1 Writing reports

While essays are often concerned with abstract or theoretical subjects, a report is a description of a situation or something that has happened. In academic terms, it might describe:

- (a) an experiment you have conducted
- (b) a survey you have carried out
- (c) a comparison of alternative proposals to deal with a situation

Clearly there is a big difference between describing a scientific laboratory experiment and reporting on students' political opinions. In some areas (e.g. laboratory work), your teachers will make it clear what format you should follow. However, most reports should include the following features:

Introduction

- background to the subject
- reasons for carrying out the work
- review of other research in the area

Methods

- how you did your research
- description of the tools/materials used

Results

- what you discovered
- comments on likely accuracy of results

Discussion

- discussion of your main findings
- comments on the effectiveness of your research

Conclusion

- summary of your work
- suggestions for further research

2 Essays and reports

In comparison with essays, reports are likely to:

- (a) be based on primary as well as secondary research
- (b) use numbering (1.1, 1.2) and sub-headings for different sections
- (c) be more specific and detailed

In most other respects, reports are similar to essays, since both:

- (a) have a clear and logical format
- (b) use objective and accurate academic style
- (c) include citations and references
- (d) make use of visual information in the form of graphs and tables
- (e) include appendices where necessary

■ Decide whether the following topics are more likely to be written as reports or essays.

Topic	Report	Essay
1 The development of trade unions in South Africa		
2 Two alternative plans for improving the sports centre		
3 A study you conducted to compare male and female attitudes to eating		
4 An overview of recent research on the human genome		
5 The arguments for and against capital punishment		

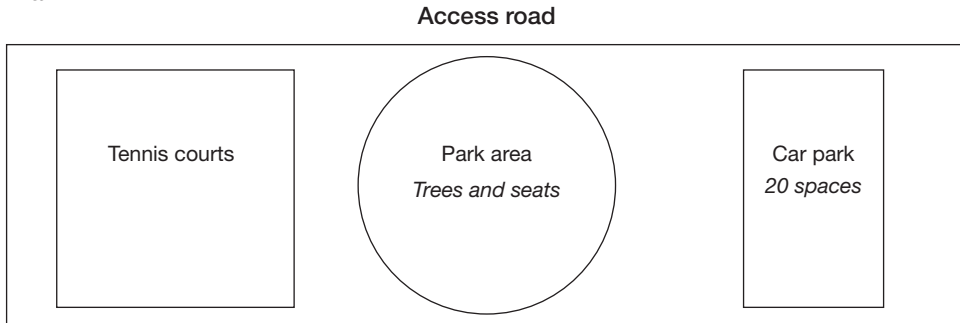
► For an example of report writing, see [Unit 4.5 Surveys](#)

3 Practice

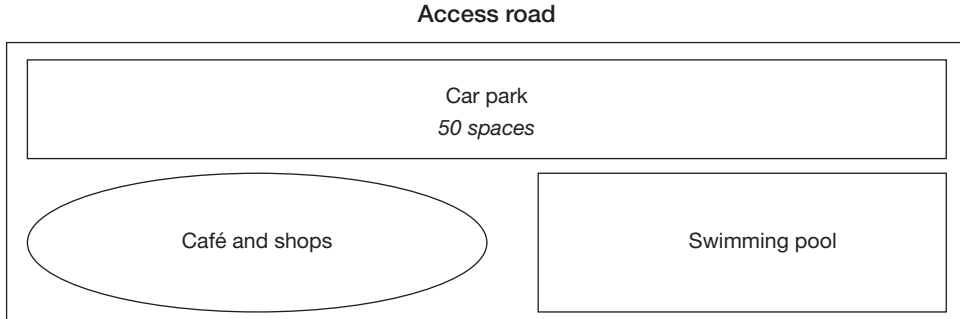
The plans below illustrate two proposals for redeveloping a site on a university campus.

- Study the plans and then read the five sentences (a–e), which are the introduction to a report on the redevelopment. The order of the sentences has been mixed up. Put them in the correct order. Then write the rest of the report in about 250 words.

Plan A



Plan B



- (a) The report takes into account a consultation exercise with staff and students carried out last autumn.
- (b) Two alternatives schemes for redevelopment have been put forward, as can be seen in Plans A and B above.
- (c) This report attempts to compare the two schemes on this basis and to establish which is the more suitable.
- (d) The aim of the redevelopment is to improve facilities for both staff and students, and at the same time enhance the appearance of this part of the campus.
- (e) Due to the recent closure of the maintenance depot, a site approximately 250 metres long and 100 metres wide has recently become vacant on the west side of the university campus.

4 Scientific reports

Scientific research

This is usually conducted in order to support a hypothesis or to validate the work of others. An accurate written record of the experiment is important because it allows other researchers to share your work. At graduate level or above, your research is adding to an international body of data on your particular area of study.

In general, scientific reports follow the same guidelines as other academic writing in terms of style and vocabulary. However, your department may well have its own requirements, for example the organisation of a report, so it is advisable to ask if these exist.

Format

Reports of laboratory experiments in disciplines such as biology, chemistry and physics generally include the following sections:

Title

Abstract

Introduction

Methods

Results

Discussion

References

(a) Title

This should contain the essential elements of the report in (ideally) no more than 12 words:

The effect of temperature changes on the germination of wheat (Triticum aestivum)

(b) Abstract

The function of an abstract is to help a potential reader identify whether your report is relevant to his or her research interests. It is essentially a summary in about 200 words of each part of the report, and so it is commonly written after the last draft is finalized. It should include the principal conclusions, and be written in the same tenses as the main report.

(c) Introduction

The introduction should contextualise your work with reference to other similar research. It should cite previous research papers that you have studied, in order to explain the purpose of your work (e.g. to confirm or extend their findings). It must contain a

purpose statement (why you did this experiment) or a hypothesis you wished to evaluate, or both.

(d) Method

This section explains how you did the research. It should allow another researcher to repeat your work, so it needs to include a description of equipment and materials used, as well as the process you followed. You may wish to include diagrams or photographs to illustrate the set-up in the laboratory. The passive is normally used (three samples were prepared) rather than the active (we prepared . . .). As the research is concluded, the past tense should be used throughout.

(e) Results

Again using the past tense, here you summarise all the results obtained. Detailed data may be presented in tables and graphs, with only the most important features highlighted in the text. You must include all results, including unexpected ones that do not conform to your hypothesis.

(f) Discussion

This section links back to the introduction by comparing your results with the original purpose or hypothesis. It aims to evaluate the experiment in terms of your findings and compare them to your expectations. It may be necessary to refer to the relevant literature. The conclusion should make it clear whether you feel that your hypothesis has been supported, and if there are changes that you would make to the design of the experiment if you were to repeat it.

(g) References

As in all academic writing, this is a list of all the sources you have specifically mentioned in your report.

► See [Unit 1.8](#) References and Quotations



Reports

UNIT 4.5

Surveys

Surveys, in which people are asked questions about their behaviour or opinions, are a common feature of academic work. This unit deals with the design of effective questionnaires for surveys, and presents a suitable structure for reporting the results.

1 Conducting surveys

■ What are the reasons for carrying out surveys in academic life? List your ideas below.

- (a) *To replicate other research* _____
- (b) _____
- (c) _____
- (d) _____

2 Questionnaire design

Writing an effective series of questions is a vital part of conducting a survey. You must think carefully about what your aims are, and how to achieve them in the simplest way. There is no value in collecting a mass of information that is irrelevant to your topic.

- (a) Which is the better question?
 - (i) How old are you?
 - (ii) Are you (a) under 20 (b) between 21–30 (c) over 30?

- (b) What is the main difference between the two questions below?
- (i) How do you usually relax at weekends?
 - (ii) At weekends, do you relax by (a) doing sport (b) playing computer games (c) sleeping?
- (c) How many questions should your questionnaire contain?

When designing your questionnaire:

- (a) Limit the number of questions so the respondent can answer them in a minute or two. Long and complicated questionnaires will not receive accurate replies.
- (b) Keep questions clear and simple, and not too personal.
- (c) Closed questions (bii) are easier to process, but open questions (bi) will collect a wider range of responses.
- (d) You should try putting the questions to a classmate before beginning the full survey, and be ready to modify any that were not clear.
- (e) Do not collect unnecessary information (e.g. do you need to know if the respondent is undergraduate or postgraduate?) If not, do not ask!

3 Survey language

- Study the report of a survey carried out on a university campus. Complete the report by inserting suitable words from the box below into the gaps (more words than gaps).

sample	conducted	method	respondents	random	questions
majority	questioned	mentioned	interviewees	common	
questionnaire	unusual	generally	minority	slightly	

STUDENT EXPERIENCE OF PART-TIME WORK

Introduction

With the introduction of course fees and the related increase in student debt, more students are finding it necessary to work part-time. The survey was

- (a) _____ to find out how this work affects student life and study.

Method

The research was done by asking students selected at (b) _____ on the campus to complete a (c) _____ (see Appendix 1). 50 students were (d) _____ on Saturday, 23 April, with approximately equal numbers of male and female students.

Table 1 Do you have, or have you had, a part-time job?

	Men	Women	Total	%
Have job now	8	7	15	30
Had job before	4	6	10	20
Never had job	14	11	25	50

Findings

Of the (e) _____, 30 per cent currently had part-time jobs, 20 per cent had had part-time jobs, but half had never done any work during university semesters (see Table 1). (f) _____ who were working or who had worked were next asked about their reasons for taking the jobs. The most common reason was lack of money (56 per cent), but many students said that they found the work useful experience (32 per cent) and others (g) _____ social benefits (12 per cent).

The 25 students with work experience were next asked about the effects of the work on their studies. A significant (h) _____ (64 per cent) claimed that there were no negative effects at all. However, 24 per cent said that their academic work suffered (i) _____, while a small (j) _____ (12 per cent) reported serious adverse results, such as tiredness in lectures and falling marks.

Further (k) _____ examined the nature of the work that the students did. The variety of jobs was surprising, from van driver to busker, but the most (l) _____ areas were catering and bar work (44 per cent) and secretarial work (32 per cent). Most students worked between 10 and 15 hours per week, though two (8 per cent) worked over 25 hours. Rates of pay were (m) _____ near the national minimum wage, and averaged £6.20 per hour.

The final question invited students to comment on their experience of part-time work. Many (44 per cent) made the point that students should be given larger grants so that they could concentrate on their studies full-time, but others felt that they gained something from the experience, such as meeting new people and getting

insights into various work environments. One student said that she had met her current boyfriend while working in a city centre restaurant.

Conclusions

It is clear that part-time work is now a common aspect of student life. Many students find jobs at some point in their studies, but an overwhelming majority (88 per cent) of those deny that it has a damaging effect on their studies. Most students work for only 2–3 hours per day on average, and a significant number claim some positive results from their employment. Obviously, our survey was limited to a relatively small (n) _____ by time constraints, and a fuller study might modify our findings in various ways.

4 Question forms

Question 1 is given above [Table 1](#). What were the other questions in this survey?

- Using the report, write possible questions below.

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

5 Tenses

- What is the main tense in (a) Findings and (b) Conclusion? Explain the reasons for the difference.

6 Practice

- You are preparing a survey on one of the following subjects. Write a questionnaire of no more than six questions to collect the most useful data.
 - (a) Patterns of student spending
 - (b) Student satisfaction with teaching methods
 - (c) Customer attitudes to taxi companies

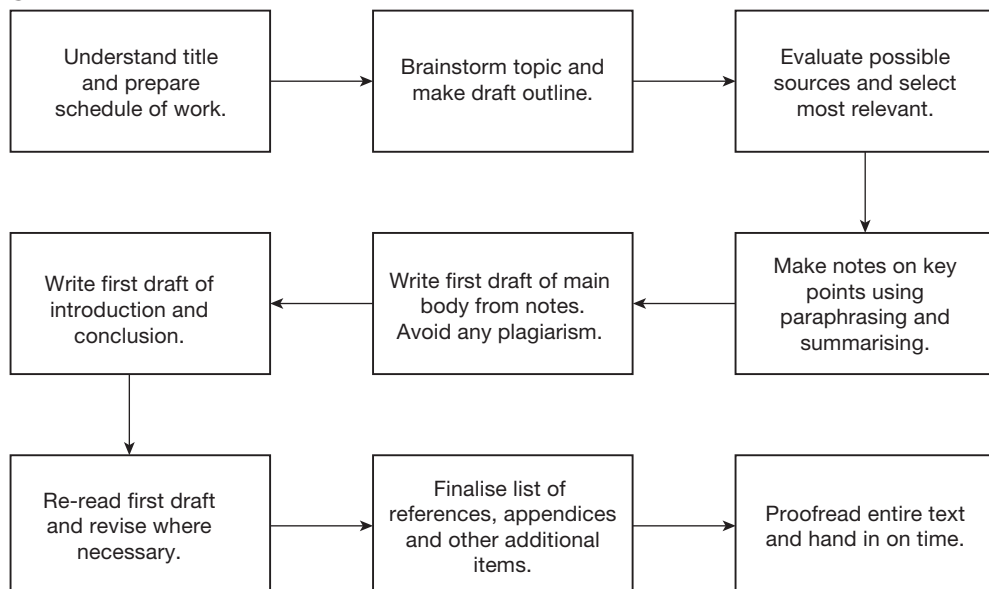
Test Your Progress

Describing a process: writing an essay

This exercise is designed to allow students to assess their progress in academic writing.

- Study the flow chart below, which explains the process of writing an essay. Then complete the description of the process by adding one suitable word to each gap in the text opposite.

START HERE



The first (a) _____ of essay writing is to read and understand (b) _____ title, and then to prepare a schedule of work (c) _____ the available time. (d) _____ the topic should be brainstormed (e) _____ a draft outline prepared. Next, possible sources have to be evaluated (f) _____ and the most relevant selected, after (g) _____ you can start making notes, using paraphrasing and summarising (h) _____. When you have collected enough material to (i) _____ the question, the first draft of the main body can (j) _____ written from the notes, (k) _____ care to avoid any plagiarism. Subsequently, (l) _____ can write the first draft of the introduction and conclusion, (m) _____ that a logical approach to the title is developed. (n) _____ this the whole draft must be critically reread and revised for (o) _____ clarity and accuracy. The penultimate stage is (p) _____ prepare a final list of references, appendices and other items such as (q) _____. Finally, the whole text (r) _____ be thoroughly proofread before handing in the assignment on time.

Glossary

Abbreviation

The short form of a word or phrase (see 3.2)

Abstract

A short summary of the aims and scope of a journal article (see 1.3)

Acknowledgements

A list of people the author wishes to thank for their assistance, found in books and articles

Appendix (plural – appendices)

A section at the end of a book or article contain supplementary information

Assignment

A task given to students, normally for assessment

Authority

A well-known expert on a subject

Back issue

A previous issue of a journal or magazine

Bias

A subjective preference for one point of view

Bibliography

A list of sources an author has read but not specifically cited

Brainstorm

A process of collecting ideas on a topic at random (see 1.5)

Case study

A section of an essay that examines one example in detail (see 4.1)

Citation

An in-text reference providing a link to the source (see 1.4, 1.8)

Cohesion

Linking ideas in a text together by use of reference words (see 2.3)

Coursework

Assessed assignments given to students to complete during a course

Conclusion

The final section of an essay or report (see 1.11)

Contraction

A shortened form of pronoun and verb (e.g. she's, I'd)

Criteria (singular – criterion)

The principles on which something is judged or based

Deadline

The final date for completing a piece of work

Draft

The first attempt at a piece of writing

Edited book

A book with contributions from a number of writers, controlled by an editor

Extract

A piece of text taken from a longer work

Flow chart

Diagram that illustrates the stages of a process

Formality

In written work, the use of a non-idiomatic style and vocabulary

Format

The standard pattern of layout for a text

Heading

The title of a section of text

Higher degree

A Master's degree or Doctorate

Hypothesis

A theory that a researcher is attempting to explore/test

Introduction

The **first part** of an essay or article (see 1.11)

Journal

An academic publication in a specialised area, usually published quarterly (see 1.2)

Literature review

A section of an article describing other research on the topic in question (see 4.2)

Main body

The principal part of an essay, after the introduction and before the conclusion

Margin

The strip of white space on a page around the text

Module

Most academic courses are divided into modules, which examine a specified topic

Outline

A preparatory plan for a piece of writing (see 1.5)

Paraphrase

A rewriting of a text with substantially different wording and organisation but similar ideas

Peer review

The process of collecting comment from academic authorities on an article before publication in a journal. This system gives increased validity to the publication.

Phrase

A few words that are commonly combined (see 1.1)

Plagiarism

Using another writer's work without acknowledgement in an acceptable manner (see 1.4)

Primary research

Original research (e.g. a laboratory experiment or a sociological enquiry)

Quotation

Use of the exact words of another writer to illustrate your writing (see 1.8)

Redundancy

The unnecessary repetition of ideas or information (see 2.13)

References

A list of all the sources you have cited in your work (see 1.8)

Register

The level of formality in language

Restatement

Repeating a point in order to explain it more clearly

Scan

A method of reading in which the eyes move quickly over the page to find a specific item

Skim

A related reading technique to quickly find out the main ideas of a text

Source

The original text you have used to obtain an idea or piece of information

Summary

A shorter version of something (see 1.7)

Synonym

A word or phrase with a similar meaning to another (see 3.9)

Synopsis

A summary of an article or book

Term

Word or phrase used to express a special concept

Word class

A grammatical category (e.g. noun, adjective)

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Answers

Providing answers for a writing course is less clear-cut than for other language areas. In some exercises, there is only one possible answer, but in other cases several possibilities exist. Teachers need to use common sense, and accept any reasonable answer. In the case of exercises where students can choose their own topic and it is therefore impossible to provide an answer, students still appreciate having an example answer, and so some have been included.

Academic Writing Quiz

- 1) b (see [Unit 1.2](#)) 2) c (see [Unit 1.1](#)) 3) a (see [Unit 1.5](#)) 4) c (see [Unit 1.11](#))
 5) b (see [Unit 1.4](#)) 6) c (see [Unit 1.6](#)) 7) a (see [Unit 1.8](#)) 8) b (see [Unit 1.7](#))
 9) c (see [Unit 1.10](#)) 10) a (see [Unit 1.11](#)) 11) b (see [Unit 1.12](#)) 12) c (see [Unit 1.3](#))

PART 1

1.1 Background to Writing

1 The purpose of academic writing

Other reasons might include:

- To present a hypothesis for consideration by others
- To make notes on something read or heard

Possibilities include:

- Semi-formal vocabulary, lack of idioms
- Use of citation/references
- Use of both passive and active

2 Common types of academic writing

Notes: A written record of the main points of a text or lecture, for a student's personal use.

Report: A description of something a student has done (e.g. conducting a survey).

Project: A piece of research, either individual or group work, with the topic chosen by the student(s).

Essay: The most common type of written work, with the title given by the teacher, normally 1,000–5,000 words.

Dissertation/Thesis: The longest piece of writing normally done by a student (20,000+ words) often for a higher degree, on a topic chosen by the student.

Paper: A general term for any academic essay, report, presentation or article.

3 The format of long and short writing tasks

- (a) abstract
- (b) references
- (c) appendix
- (d) acknowledgements
- (e) literature review
- (f) case study

4 The features of academic writing

- (a) title
- (b) sub-title
- (c) heading
- (d) sentence
- (e) phrase
- (f) paragraph

6 Simple and longer sentences

(*Example sentences*)

- (a) In 2011, the company produced nearly 165,000 vehicles.
- (b) Vehicle production fell in 2012.
- (c) Vehicle production declined slightly in 2012, and then more steeply in 2013.
- (d) Between 2009 and 2013, vehicle production peaked in 2011, when the number reached over 164,000.

7 Writing in paragraphs

See [Unit 1.10.1](#) Organising Paragraphs for initial questions

para 2 begins: But a new use for charcoal . . .

para 3 begins: The other benefit of biochar . . .

para 4 begins: But other agricultural . . .

1.2 Reading: Finding Suitable Sources**1 Academic texts**

Text 1 – Yes – it summarises some relevant research, and includes citations

Text 2 – No – apparently an informal personal report

Text 3 – Possibly – appears to be a newspaper article but includes relevant information

Text 4 – Yes – an academic article with citations

Possible answers:

<i>Feature</i>	<i>Example</i>
2 Use of references	(Buckley and Witt, 1990; Hall, 1991)
3 Impersonal style	. . . it has long been recognised that it is important to study the tourists' attitude.
4 Long, complex sentences	Equally, from a political perspective, the nature of state involvement in and policies for tourism is dependent on both the political-economic structures and the prevailing political ideology in the destination state, with comparisons typically made between market-led and centrally planned economies.

2 Types of text

Possible answers:

<i>Text type</i>	<i>Advantages</i>	<i>Disadvantages</i>
Website	Usually up to date	Possibly unreliable and/or unedited
Journal article	Often focuses on a special area	May be too specialised or complex
Official report (from government)	Contains a lot of detail	May have a narrow focus
Newspaper or magazine article	Easy to read and up to date	May not be objective and not give sources
e-books	Easily accessible	Must be read on screen

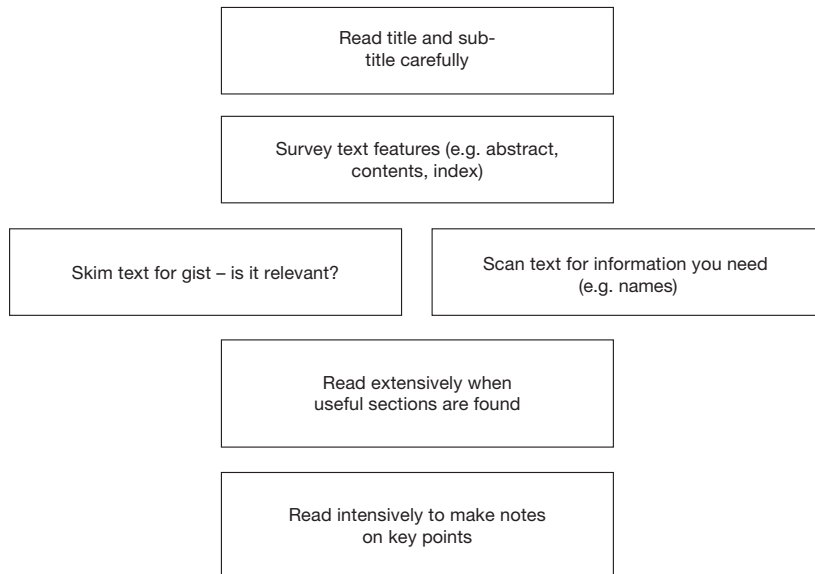
4 Using library catalogues

Title 1 is up to date and appears to be a general introduction. The other titles are more specialised, but title 2 is also recent and might contain some relevant sections, while title 7 could be worth considering.

1.3 Reading: Developing Critical Approaches

1 Reading methods

Choosing suitable texts



Other reading skills – possible answers:

- Text genre recognition
- Dealing with new vocabulary

3 Reading abstracts

- (a) Background position – A growing chorus of scholars . . . American democracy.
- (b) Aim and thesis of paper – This article questions . . . engaged citizenship.
- (c) Method of research – Using data from . . . political participation.
- (d) Results of research – Rather than the erosion . . . in America.

4 Fact and opinion

- (a) fact (not true)
- (b) opinion
- (c) fact (not true)
- (d) opinion
- (e) fact (true)
- (f) fact (true) + opinion

6 Further practice

- (a) 1 Probably unreliable. The adjectives used (easily, quickly) and the lack of concrete information suggest that this text is not to be trusted. In addition, common sense should suggest that you cannot legally earn hundreds of pounds in a few hours.
- 2 Probably reliable. The advice the writer is giving appears to be common sense, although not everyone might agree with all of it (e.g. cooking is fun).
- 3 Probably reliable. The facts given can be confirmed by students' own experience.
- (b) Educating the poorest
Positive aspects: Contains some relevant ideas. The studies mentioned could be followed up using a search engine.
Negative aspects: Rather superficial and informal in style. No citations.

7 Critical thinking

The responses to these questions will vary from student to student, which is the nature of the critical approach.

1.4 Avoiding Plagiarism**3 Degrees of plagiarism**

- | | |
|-----|-------|
| 1 Y | 6 N |
| 2 Y | 7 Y |
| 3 Y | 8 N |
| 4 N | 9 Y/N |
| 5 Y | 10 Y |

4 Avoiding plagiarism by summarising and paraphrasing

- (a) Acceptable – a correctly referenced summary
- (b) Plagiarised – original wording with minor changes to word order
- (c) Acceptable – a correctly referenced quotation
- (d) Technically plagiarism – mistake in date means the citation is incorrect
- (e) Plagiarised – some original wording and no citation

5 Avoiding plagiarism by developing good study habits*(Possible further suggestions)*

- Check that your quotations are exactly the same wording as the original.
- When paraphrasing, alter the structure as well as the vocabulary.
- Make sure your in-text citations are all included in the list of references.

6 Practice*Source:* Any text that students use to obtain ideas or information*Citation:* Short in-text note giving the author's name and publication date*To summarise:* To reduce the length of a text but keeping the main points*Quotation:* Using the exact words of an original text in your work*Reference:* Full publication details of a text to allow a reader to access the original*To cheat:* To gain advantage dishonestly**1.5 From Understanding Titles to Planning****2 Analysing essay titles***Analyse:* Break down into the various parts and their relationships*Assess:* Decide the worth or value of a subject*Describe:* Give a detailed account of something*Discuss:* Look at various aspects of a topic, compare benefits and drawbacks*Examine:* Divide into sections and discuss each critically*Illustrate:* Give examples*Outline:* Explain a topic briefly and clearly*Suggest:* Make a proposal and support it*Summarise:* Deal with a complex topic by reducing it to the main elements

(NB: 'summarise' and 'outline' are very similar)

3 Practice

- (a) Summarise/discuss

Give the factors behind the development, and explore the possible consequences.

- (b) Describe

List the most likely causes of this situation.

- (c) What/Are there

Give the advantages and disadvantages.

- (d) What/Evaluate

List the most important sources, and say how useful they are in reducing CO₂ emissions.

- (e) Discuss/indicating

Describe how earthquakes affect different types of structures with reference to the soil characteristics, and explain how the structures can be made more resilient.

4 Brainstorming

Possible benefits

Young children more open, less inhibited

They appear to have better memories

May improve understanding of their own language

Possible drawbacks

Young children may not understand the necessary grammar

They may not grasp the cultural context of a second language

5 Essay length

(NB: These figures are only a guide and individual students may have a different approach.)

- (a) Describe/How
Approximately 50:50
- (b) How/Illustrate
Approximately 40:60
- (c) Outline/Suggest
Approximately 50:50
- (d) What/how
Approximately 30:70

6 Outlines

- (c) Lists can help develop a logical structure and make it easier to allocate space, but are rather inflexible.
Mind maps are more flexible as extra items can be added easily.
- (d) Possible list outline:
The likely results
 - decline in number of shops
 - increase in delivery services
 - change in character of town centres

1.6 Finding Key Points and Note-making

1 Finding key points

(Example titles)

Marketing to the older generation

Selling to retired people

An ageing market

Key points:

- (a) The generation born after the Second World War, sometimes called the baby boomers, are now reaching retirement age, and businesses are starting to realise that they are a wealthier market than any previous retirement group.
- (b) There are, however, certain difficulties in selling to this market. Some customers resent being addressed as 'old' since they see themselves as more youthful, while there is a huge variation in the profile of the baby boomers.

2 Finding relevant points

Key points:

- 1 Currently over two-thirds of Americans are believed to be either overweight or obese, but recently it has been discovered that the situation may have stabilised.
- 2 This trend may have important consequences for the healthcare system: according to a recent study (Finkelstein *et al.*, 2009) an obese American is likely to cost the system over 40 per cent more than someone with normal weight.
- 3 . . . but medical researchers still struggle to understand the basic causes of the problem, which is that obesity in America is now three times greater than fifty years ago.
- 4 . . . those with irregular and badly paid employment are more likely to eat what is convenient and tasty . . .
Another possibility is that food is now cheaper relative to income . . .
. . . fewer calories are used in doing domestic chores around the house . . .
- 5 Although Americans often dislike being told what to do by their government, these campaigns may be finally having an effect.

3 Practice A

(Example notes)

Source: (Herapath, T. (2012) *Journal of Transatlantic Contexts* 14, p. 319)

Have Americans stopped getting fatter?

- 2 May reduce future healthcare costs (obesity adds 40 per cent to medical expenses – Finkelstein *et al.*, 2009)
- 3 No agreement on reasons for obesity in US
- 4 Three possible causes: (a) more people have disorganised lives (b) food has become cheaper (c) people do less physical work
- 5 New trend may be result of govt. action on food labelling and children's diets

4 Why make notes?

- (b) To avoid plagiarism
- (c) To keep a record of reading/lectures
- (d) To revise for exams
- (e) To help remember main points

5 Note-making methods

The notes are paraphrased, not copied from the text. The source is included.

7 Practice B

(Example notes)

Source: (Kitschelt, P. (2006) *How the Brain Works*. Berlin: Freihaus, p. 73)

The brain and the memory process

- (1) Siesta can help improve memory > learning
- (2) New memories > hippocampus (short term) > pre-frontal cortex (long term)
- (3) Process happens during Stage 2 sleep
- (4) Univ. Calif. team researched process:
 - 2 groups: (a) stayed awake (b) had siesta
 - group (b) performed better at memory tasks in evening

1.7 Summarising and Paraphrasing

1 What makes a good summary?

A good summary requires: selection of most important aspects/clear description/accuracy

2 Stages of summarising

- (c)
- (d)
- (b)
- (a)
- (e)

3 Practice A – Mechanical pickers

- 1 = a (contains all key points)
- 2 = c (includes unnecessary examples)
- 3 = b (includes information not in original, e.g. increase in profits, and fails to describe the machines)

4 Practice B – Wealth and fertility

(Example answers – includes answers for a)

- (b)
 - (i) Falling levels of fertility have generally been found as countries become richer.
 - (ii) In some, number of children born fell below replacement rate.
 - (iii) Two results: smaller populations and larger numbers of elderly needing assistance.
 - (iv) Recent research claims that a new situation may be developing.
 - (v) Comparison of HDI (human development index: life expectancy/income/education) with fertility found that in most highly rated (+0.9) countries, fertility is rising.

- (c) *(Example summary)*

The growing family?

Falling levels of fertility have generally been found as countries become richer. In some, the number of children born has fallen below the replacement rate. There are two likely results: smaller populations and larger numbers of elderly needing assistance. But recent research claims that this pattern may be changing. A comparison of HDI (human development index: life expectancy, income and education) with fertility found that in most highly rated (HDI +0.9) countries, fertility is rising.

- (d) *(Example summary)*

Research suggests that the long-term decline in human fertility may be reversing in some of the most advanced societies.

5 Practice C – The last word in lavatories?

(Example summary)

The Washlet is an expensive lavatory that is popular in Japan, with a range of special features. Its maker, the Toto company, is hoping to expand sales in the West, but different regulations about toilet design and electrical fittings make this a challenging goal.

7 Practice D – The causes of the industrial revolution

- a Quite good, but lack of precision (at that time) and unsuitable register (bosses).
- b The best paraphrase, with all main points included and a significantly different structure.
- c A poor paraphrase, with only a few words changed and extra and inaccurate information added (Britain was the only country . . .).

9 Practice E – Brains and sex

(A number of possibilities are acceptable here. These are suggestions.)

- (a) It is generally considered that males and females think and behave in different ways. Women seem to have superior memories, better social abilities and are more successful at multi-tasking. Men, by comparison, seem to focus better on subjects and have superior motor and spatial abilities, although obviously many people do not follow these patterns.
- (b) The explanation for these differences may be the way people behaved thousands of years ago, when men were hunters while women stayed at home as carers for their children. But another approach is to see the behaviour as resulting from the way our brains function.
- (c) The brain functioning of 428 men and 521 women has been compared using brain scans, in recent research by Ragini Verma's team at Pennsylvania University. Fascinating differences were found by tracking the pathways of water molecules around the brain area.
- (d) The cerebrum is the name for the upper part of the brain, and this consists of left and right halves. It is believed that logic is controlled from the left half, while the right side deals with intuition. Dr Verma's research discovered that the female molecule pathways were mainly between the two parts, but the male pathways were generally within the halves. Her conclusion is that these findings are an explanation for differences in skills between the sexes, for example greater social ability in women in contrast to stronger male focus on single issues.

10 Practice F – The past below the waves

(Example answer)

Archaeologists can learn about multiple aspects of historic societies by studying shipwrecks, but most of the millions lying on the ocean floor are too deep for divers to examine. They can only work above 50 metres, restricting them to coastal wrecks that are more likely to have been disturbed. Research in mid-ocean has required expensive submarines with their support vessels, limiting the number of wrecks that can be explored. But this may change due to the latest craft, called an automatic underwater vehicle or AUV. Not requiring a support ship and operating independently, this will be used by an American team to examine part of the seabed off the Egyptian Mediterranean coast close to the site of a Bronze Age harbour.

1.8 References and Quotations**1 Why use references?**

- (a) N
- (b) Y
- (c) Y
- (d) N
- (e) Y
- (f) N

2 Citations and references

Smith (2009) argues that the popularity of the Sports Utility Vehicle (SUV) is irrational, as despite their high cost most are never driven off-road. In his view ‘they are bad for road safety, the environment and road congestion’ (Smith, 2009: 37).

The first is a summary, the second a quotation.

A summary allows the writer to condense ideas, while a quotation uses the words of the original author, which have authenticity and may be difficult to improve.

6 Practice

(Example answers)

- (a) According to Hoffman (2012), mobile phones have had a powerful impact in the developing world as they offer previously unavailable services, and have led to the growth of new, focused local operators.
- (b) Hoffman points out that the special conditions in the developing world have produced new phone operators: ‘that are larger and more flexible than Western companies, and which have grown by catering for poorer customers . . .’ (Hoffman, 2012: 87).
- (c) Hoffman (2012) argues that the impact of mobile telephony on developing countries is significant as they offer services previously unavailable, and has led to the growth of new local operators that: ‘are larger and more flexible than Western companies, and which have grown by catering for poorer customers . . .’ (Hoffman, 2012: 87).

9 Organising the list of references

- (a)
 - (i) Dörnyei
 - (ii) Bialystock/Larson-Hall
 - (iii) Flege
 - (iv) Myles
 - (v) The International Commission on Second Language Acquisition
 - (vi) Gass and Selinker
- (b)
 - (i) Author/Date/Title/Place of publication/Publisher
 - (ii) Author(s)/Date/Article title/Journal title/Volume number/Page numbers
 - (iii) Author/Date/Chapter title/Editor(s)/Book title/Place of publication/Publisher
 - (iv) Author/Title/Name of website/URL/Date of access
 - (v) Name of website/Article title/URL/Access date
 - (vi) Authors/Date/Title/Place of publication/Publisher
- (c) For book and journal titles
- (d) For titles of books and journals (not articles)
- (e) Under the name of the organisation or title of the publication
- (f)
 - (i) Bialystock, 1997
 - (ii) Dörnyei, 2009
 - (iii) Flege, 1999
 - (iv) Gass and Selinker, 2001

- (v) Larson-Hall, 2008
- (vi) Myles, nd
- (vii) The International Commission on Second Language Acquisition, nd

1.9 Combining Sources

1 Mentioning sources

- (a) 6
- (b) The level of technology anxiety
- (c) Venkatesh
- (d) Mick and Fournier
- (e) 2

2 Taking a critical approach

- (a) (*Example answers*)

<i>Summary</i>	<i>Original</i>
... steps should be taken ... such as carbon dioxide.	... it can be expected that ... burning of fossil fuels.
she mentions evidence of ... levels of CO ₂ .	Some critics claim ... unrelated to CO ₂ levels.

- (b) puts forward/maintains/presents/mentions/discusses/considers
- (c) However
- (d) But/on the other hand

3 Combining three sources

(*Example answer*)

Additionally, Lahav (2010) raises the issue of the computer models that are used to predict future climate, and argues that these may be unreliable instruments for making critical decisions. He points out that climate-change critics suggest that, given the uncertainty involved, it might be better to allocate resources to social improvements rather than green technology.

4 Practice

(*Example answer*)

There is good evidence that globalisation has resulted in a considerable increase in world trade over the past 20–30 years (Costa, 2008). However, it has been pointed out that the benefits of this are not evenly shared. While multinationals are able to use the cheapest labour for manufacturing, people in the poorest countries are no better off than they were 40 years ago (Lin, 2006). In addition, these large companies benefit from reduced import duties and so can compete more successfully with local businesses, further strengthening their market dominance (Brokaw, 2012).

1.10 Organising Paragraphs

1 Paragraph structure

The answers are found in (2).

3 Practice A

(a) Topic sentence

Example

Reason

Supporting point 1

Supporting point 2

Supporting point 3

(b) for instance/It is widely believed/In addition/But above all

(c) Despite this

4 Development of ideas

(a) Topic sentence iv

Definition ii

Result 1 i

Result 2 vi

Result 3 v

Conclusion iii

(b) All these claims

(c) These/but/When this/Others/in other words/Even

6 Practice B

(Example answer)

Bill Gates was born in 1955, the second child in a middle-class Seattle family. At the age of 13 he became interested in writing computer programmes, and in 1975 Gates and his school friend Allen started a programming business called Micro-Soft. In 1980 IBM asked their company to write an operating system for IBM's new PC. This system was called MS-DOS. Five years later, Microsoft launched the Windows operating system, and in 1995 Gates became the richest man in the world. He stepped down from working at Microsoft in 2006 to focus on running his charitable foundation.

7 Practice C

(Example answer)

Trams

Trams were first introduced in the late nineteenth century, when they provided cheap and convenient mass transport in many cities in America and Europe. But their drawbacks were that the rail-based systems were expensive to maintain, and the fixed tracks made them inflexible as cities developed. Consequently, by the 1950s, many European and Asian cities had closed their tramway systems.

Today, however, trams are regaining their popularity. They are seen as less polluting than cars and relatively cheap to operate. As a result, cities such as Paris and Manchester have built new systems. Despite this, the high cost of constructing tramways and difficulties with traffic congestion blocking the tracks mean that trams remain a controversial transport option.

1.11 Introductions and Conclusions

1 Introduction contents

- | | | |
|---------|---|---|
| (a) (i) | A definition of any unfamiliar terms in the title | Y |
| (ii) | Your opinions on the subject of the essay | N |
| (iii) | Mention of some sources you have read on the topic | Y |
| (iv) | A provocative idea or question to interest the reader | N |
| (v) | Your aim or purpose in writing | Y |
| (vi) | The method you adopt to answer the question (or an outline) | Y |
| (vii) | Some brief background to the topic | Y |
| (viii) | Any limitations you set yourself | Y |
- (b) (A) Background
(B) Outline
(C) Purpose
(D) Mention of sources
(E) Definition
(F) Limitation

2 Introduction structure

Essential: Your purpose/Your method/Background/Outline

Optional: Definitions/A mention of some sources/Limitations

3 Opening sentences

(Example answers)

- (a) In recent years, there has been a steady criticism of the lack of women in senior management.
 (b) In the past decade, global warming or climate change has become one of the most pressing issues on the international agenda.
 (c) There has been some decline in rates of infant mortality in the developing world over the last 20 years, but in many countries progress has been slow.
 (d) Rapid internal migration from the countryside to the cities is a feature of many developing societies.

4 Conclusions

- | | | |
|-----------|-------|-------|
| (A) (a) Y | (d) Y | (g) Y |
| (b) Y | (e) Y | (h) N |
| (c) N | (f) Y | |
-
- | | | |
|-----------|---------|--------|
| (B) (i) f | (iii) e | (v) g |
| (ii) b | (iv) d | (vi) a |

5 Practice

- 1 e
2 c
3 a
4 d
5 b

1.12 Rewriting and Proofreading

3 Practice B

(Example rewrite)

Organisations inevitably face risks by permitting researchers to interview employees, so these must be understood and minimised by the design of the research project. If employees criticise other workers in the organisation, they may be punished, or alternatively they may feel unable to express their true feelings and so invalidate the interviews. Consequently, researchers must protect the reputation of the organisation and the value of their own work by carefully explaining the purpose of the study and insisting on strict anonymity through the use of false names. By doing this, both parties should benefit from the research.

5 Practice C

- (i) Africa is not a country: *such as Nigeria*
- (ii) Innocence is a noun: *Young and innocent*
- (iii) Question mark needed
- (iv) Present perfect needed with 'since': *Since 2005, there have been . . .*
- (v) 'Successfulness' is not a word: *success*
- (vi) 'pervious' is incorrect: *previous*
- (vii) 'one of the . . .' needs plural noun: *one of the largest companies . . .*
- (viii) Repetition: *the essay will conclude with an analysis of . . .*
- (ix) Time periods need definite article: *the nineteenth century*
- (x) *when consumers go out shopping . . .*

6 Practice D

- (i) Style – use children
- (ii) Singular/plural – their lines
- (iii) Vocabulary – torment is too strong, use inconvenience
- (iv) Word ending – different effects
- (v) Factual – 1973
- (vi) Word order – overcome
- (vii) Punctuation – no comma needed
- (viii) Spelling – Hungary
- (ix) Missing word – the world
- (x) Tense – were

7 Practice E

(Corrected version)

A bicycle is one of the most efficient machines ever designed. Cyclists can travel four times faster than walkers, while using less energy to do so. Various people invented early versions of the bike, but the first model with pedals that was successfully mass produced was made by a Frenchman, Ernest Michaux, in 1861. Later additions included pneumatic tyres and gears. Today, hundreds of millions of bicycles are in use all over the world.

PART 2

2.1 Argument and Discussion

1 Discussion vocabulary

- (a) benefits/advantages
- (b) drawbacks/disadvantages
- (c) negative
- (d) advantages/benefits
- (e) disadvantages/drawbacks
- (f) benefit/advantage

2 Organisation

Vertical: a simpler pattern suitable for short essays

Horizontal: this allows a more complex approach in longer essays

3 Practice A

Possible ideas include:

+	–
No time wasted commuting to work	Employees feel isolated
Gives employees more flexibility	May not suit all employees
Saves expensive office space	Home may contain distractions
	Requires different management style

Example outline with vertical structure:

- (a) Introduction: Reasons for growth of home-working: development in communication technology, demand for more flexible work patterns.
- (b) Drawbacks: Employees may feel isolated, be distracted by activities at home. May not suit all employees, some prefer more direct management.
- (c) Benefits: Companies need to provide less office space, less time spent on commuting = more work time, employees have more flexibility.
- (d) Discussion: Of benefit to certain employees in some roles, but necessary to have regular contact with colleagues and managers.

5 Counterarguments

The writer's position is essentially critical of the way prisons work.

(Example answers)

<i>Counterargument</i>	<i>Your position</i>
It has been claimed that employees may waste time at home,	but in practice there seems little evidence for this.
Although home-working may save companies money by reducing the need for office space,	employees need to have a well-equipped workspace in their home.

6 Providing evidence

- (a) 2
- (b) Education system
- (c) Many young people do not use 'digital tools'
- (d) Sceptical of the 'digital native' theory

7 Practice B

(Example answer)

There has been considerable debate about the value of space exploration, in view of the high costs involved. Supporters such as Donnet-Kammel (2005) claim that this is a vital method of collecting data about the structure of the universe, and additionally point out that there have been many practical benefits arising from the space programme, such as satellite communication. The example of the space station is also given as an instance of the value of the research programme in encouraging international cooperation.

In contrast, critics (e.g. Soroka, 2000) point to the huge costs involved in launching space probes, claiming that these resources would be better devoted to solving the serious earthly problems of hunger and disease. Furthermore, they argue that much of the space programme is effectively a testing ground for new weapons, such as missiles, and brings little benefit to ordinary people. In the context of the current economic crisis, a more critical approach is clearly needed in deciding which of those projects have real value.

2.2 Cause and Effect**2 Practice A**

(Example answers)

- (b) Higher rates of literacy often lead to greater demand for secondary education.
- (c) As a result of constructing a new airport, more tourists arrived.
- (d) Due to last year's national election, a new government was formed.
- (e) Installing speed cameras on main roads produces a fall in the number of fatal accidents.
- (f) Opening a new hospital in 2012 reduced infant mortality.
- (g) More people shopping on the Internet results in stores closing on the high street.

3 Practice B

(Example answers)

- (a) Increasing use of email for messages has caused a decline in letter writing.
- (b) The violent storms last week damaged power lines in the region.
- (c) The new vaccine for tuberculosis will result in lower child mortality.
- (d) Building a high-speed railway line caused journey times to fall by 25 per cent.
- (e) The invention of the jet engine revolutionised travel.
- (f) The serious motorway accident was due to thick fog.
- (g) The 1914–1918 war partly resulted from economic rivalry between states.
- (h) The increase in obesity is a result of a more sedentary lifestyle.
- (i) Earthquakes are often caused by movements in tectonic plates.
- (j) The rising prison population was due to a harsher sentencing policy.

4 Practice C – Why women live longer*(Other answers possible)*

- (a) because of/due to/owing to
- (b) because/since/as
- (c) consequently/therefore/which is why/hence
- (d) due to/owing to/because of
- (e) because of/due to/owing to
- (f) so/therefore/thus/consequently

5 Practice D*(a) (Example paragraph)*

An increase of 25 per cent in the price of oil would have numerous results. First, it would lead to sharp rises in the cost of transport and freight, thus affecting the price of most goods. Clearly, businesses for which fuel was a significant proportion of their costs, such as airlines, would find it difficult to maintain profitability. Another consequence would be a reduction in oil consumption as marginal users switched to alternative fuels, such as gas, or made economies. There would also be increased investment in exploration for oil, as the oil companies attempted to increase supply, and this in turn would stimulate demand for equipment such as oil rigs. Finally, there would be a number of more localised effects, for instance a change in demand from larger to smaller and more economical vehicles.

2.3 Cohesion**2 Practice A**

<i>Reference</i>	<i>Reference word/phrase</i>
La Ferrera	She
new businesses	they
average life of only 4.7 years	this
one economic	the former
one social	the latter
the former . . . the latter . . .	these

4 Practice B – Famous for?

- | | |
|-------------|----------|
| (a) he | (f) he |
| (b) his | (g) they |
| (c) his | (h) This |
| (d) it/this | (i) He |
| (e) his | (j) his |

5 Practice C – Velcro

Velcro is a fabric fastener used with clothes and shoes. **It** was invented by a Swiss engineer called George de Mestral. **His** idea was derived from studying the tiny hooks found on some plant seeds. **They** cling to animals and help disperse the seeds. Velcro has two sides, one of which is covered in small hooks and the other in loops. When **they** are pressed together they form a strong bond.

Mestral spent eight years perfecting **his** invention, which **he** called ‘Velcro’ from the French words ‘velour’ and ‘crochet’. **It** was patented in 1955 and today over 60 million metres of Velcro are sold annually.

6 Practice D

(Example answer)

Wallace Carothers, the director of research at the American DuPont Corporation, invented nylon in 1935. He had previously studied chemistry, and specialised in polymers, which are molecules composed of long chains of atoms. Nylon was a strong but fine synthetic fibre that was first mass produced in 1939. It was/is used to make a wide range of products that included/include stockings, toothbrushes, parachutes, fishing lines, and surgical thread.

2.4 Comparisons

2 Practice A

- (a) Residential property in London is twice as expensive as in Rome.
- (b) Property in Moscow is slightly cheaper than in New York.
- (c) Tokyo property is nearly as expensive as property in Paris.
- (d) Singapore has significantly cheaper property than New York.
- (e) London is the most expensive of the eight cities, while Sydney is the cheapest.

(Possible answers)

- (f) Parisian property is slightly cheaper than Moscow property.
- (g) Property in Sydney is 50 per cent cheaper than in New York.

5 Practice B

- (a) Real Madrid was the richest club **in European football**.
- (b) Real Madrid’s income was almost twice **as** much as AC Milan’s.
- (c) FC Barcelona earned **considerably** more than Manchester City.
- (d) Juventus had less revenue **than** Arsenal.
- (e) Chelsea’s income was **significantly** lower than Bayern Munich’s.
- (f) Manchester United earned approximately **the** same as Bayern Munich.

6 Practice C

- | | |
|------------------------------|------------------------|
| (a) shows/compares/contrasts | (e) slightly |
| (b) rate | (f) than |
| (c) varies/fluctuates | (g) over/approximately |
| (d) same | (h) high |

2.5 Definite Articles

3 Practice A

- (a) Engineering is the main industry in **the** northern region.
- (b) Insurance firms have made record profits in **the** last decade.
- (c) Global warming is partly caused by fossil fuels.

- (d) **The** mayor has been arrested on suspicion of corruption.
- (e) **The** moons of Jupiter were discovered in **the** eighteenth century.
- (f) Tourism is **the** world's biggest industry.
- (g) **The** forests of Scandinavia produce most of Britain's paper.
- (h) **The** Thai currency is **the** baht.
- (i) Computer crime has grown by 200 per cent in **the** last five years.
- (j) **The** main causes of **the** Industrial Revolution are still debated.
- (k) Already, 3 per cent of **the** working population are employed in call centres.
- (l) **The** latest forecast predicts warmer winters in **the** next two years.
- (m) Research on energy saving is being conducted in **the** Physics faculty.
- (n) **The** best definition is often **the** simplest.

4 Practice B – The origins of @

- | | | |
|-----------|---------|---------|
| (a) – | (g) the | (m) a |
| (b) the | (h) a | (n) the |
| (c) the | (i) the | (o) the |
| (d) a/the | (j) the | (p) – |
| (e) the | (k) the | (q) – |
| (f) – | (l) a | |

2.6 Definitions

1 Simple definitions

- (a) instrument
- (b) organs
- (c) organisation
- (d) material
- (e) behaviour
- (f) process
- (g) period
- (h) grains

(Example answers)

- (i) A lecture is an academic talk used for teaching purposes.
- (j) Tuberculosis is a disease mainly affecting the lungs.
- (k) The Red Cross is a humanitarian organisation that helps people affected by disasters.
- (l) An idiom is a phrase used in colloquial language.

2 Complex definitions

- (a) a failed project
- (b) development
- (c) attachment
- (d) self-brightening
- (e) globalisation

- | | |
|-----------|--|
| (i) c | (iii) b, d |
| (ii) a, e | (iv) b (process), c (system), d (effect) |

3 Practice

(Example definitions)

- (a) **Capital punishment** involves the execution by the state of convicted criminals.
- (b) An **entrepreneurial business** is set up by somebody who demonstrates the effective application of a number of enterprising attributes, such as creativity, initiative, risk-taking, problem-solving ability and autonomy, and will often risk his or her own capital.
- (c) **E-books** are books in digital form that can be read on electronic devices.
- (d) **Urban areas** are predominantly built-up areas in which roads, housing or commercial buildings are found.
- (e) **Obesity** is a medical term meaning unhealthily overweight.

2.7 Examples

2 Phrases to introduce examples

(Example answers)

- (a) Some twentieth-century inventions, such as TV and the Internet, affected the lives of most people.
- (b) Lately, many countries, for instance China, have introduced fees for university courses.
- (c) Various companies have built their reputation on the strength of one product; a case in point is Microsoft Windows.
- (d) In recent years, more women (e.g. Angela Merkel) have become political leaders.
- (e) Certain countries such as Japan are frequently affected by earthquakes.
- (f) Many musical instruments, for example guitars, use strings to make music.
- (g) Ship canals, for instance the Panama Canal, facilitate world trade.
- (h) Politicians have discussed a range of possible alternative punishments to prison, for instance community work.

3 Practice A – The changing face of shopping

Widespread use of the Internet has led to a major change in shopping habits. It is no longer necessary to visit shops to make routine purchases, **for example many supermarkets offer delivery services for online customers**. With more specialised items **such as books and music**, Internet retailers can offer a wider range of products than bricks-and-mortar shops. They can also provide extra incentives to customers, **for instance free delivery or discounted prices**, in addition to the convenience of not having to visit a real shop. As a result, certain types of store (e.g. **bookshops**) are disappearing from the high street. Other products, however, **for instance clothing and footwear**, appear to require personal inspection and approval, and in addition many people enjoy the activity of shopping, so it seems unlikely that the Internet will completely replace the shopping centre.

4 Practice B – A new perspective?

(Possible examples)

Customs: holidays and festivals, ways of greeting people

Everyday patterns of life: types of shop, shop opening times

Inevitable differences: language, currency
 Rapid changes of mood: depression, elation
 Relatively short period: two/three months
 Some aspects of their new surroundings: freedom, independence

5 Restatement

- (a) The company's overheads, in other words the fixed costs, doubled last year.
- (b) The Roman empire (27 BC–476 AD) was a period of autocratic rule.
- (c) The Indian capital, namely New Delhi, has a thriving commercial centre.
- (d) Survival rates for the most common type of cancer (i.e. breast cancer) are improving.
- (e) Participation rates in most democracies are in decline, that is to say fewer people are voting.

2.8 Generalisations

1 Using generalisations

- (a) This may be true in some cases, but is too general to be valid.
- (b) A widely accepted fact, supported by evidence.
- (c) Similar to (b), this is a well-researched link.
- (d) Similar to (a).
- (e) Clearly true in some cases, but not valid for every situation (e.g. Paris–London).

3 Practice A

(Example answers)

- (b) Regular rainfall is necessary for good crop yields.
- (c) Honest judges are needed to ensure respect for the law.
- (d) Adequate sleep is vital for academic success.
- (e) Industrial growth tends to cause pollution.
- (f) Cold weather is likely to increase demand for gas.
- (g) Job satisfaction depends on having interesting work.

4 Practice B

(Example generalisations)

- (a) Graduates are more likely than undergraduates to study in the library.
- (b) Female undergraduates generally prefer to work in silence.
- (c) Few students choose to study outdoors.
- (d) Male graduates prefer to study in the library, while females prefer their own room.
- (e) More undergraduates than graduates work in bed.

5 Building on generalisations

- (a) To introduce the topic.
- (b) The study that compared the preferences of women in a range of countries.
- (c) To summarise the findings of the research.

6 Practice C

(Example)

- (a) The growth of tourism is often seen as being detrimental to the host society. It is claimed that growth in visitors causes pollution, overcrowding and even leads to crime. But the weakness of this argument can be shown by comparing several countries that have each experienced rapid growth in tourist numbers, with very different results.

2.9 Passives

2 Structure

- (a) The data were collected and the two groups (were) compared.
 (b) 120 people in three social classes were interviewed.
 (c) The results were checked and several errors (were) found.
 (d) An analysis of the findings will be made.
 (e) Four doctors were asked to give their opinions.
 (f) The report was written and ten copies (were) distributed.

3 Using adverbs

- (a) The company was profitably run by the Connors family until 1981.
 (b) It has been optimistically predicted that prisons will be unnecessary in the future (by Dr Weber).
 (c) All students in the exam were helpfully provided with pencils.
 (d) The percentages were accurately calculated to three decimal places (by researchers).
 (e) The essays were punctually handed in on Tuesday morning.
 (f) The life cycles of over 15 types of mice were carefully researched.

5 Practice B

<i>Passive</i>	<i>Active possible?</i>	<i>Active</i>
He was worn out	Yes	The effort . . . had worn him out
He was born	No	
John was concerned by . . .	Yes	The situation of the poor concerned John . . .
a . . . shop that was called	Yes	That he called . . .
John was helped financially	Yes	his father-in-law helped him . . .
the business was taken over	Yes	his wife took the business over . . .
she was soon assisted	Yes	their 10-year-old son assisted her

The effect of using the passive throughout would be to make the tone very formal.

6 Practice C

(Example paragraph)

In 1889, he was introduced to Florence Rowe, the daughter of a bookseller, while on holiday, and they became engaged. After they were married, her ideas affected the business: the product range was enlarged to include stationery and books. The Boots subscription library and in-store cafes were also introduced due to Florence's influence. During the First World War, the Boots factories made a variety of products, from sterilisers to gas masks. But after the war Jesse was attacked by arthritis

and, worried by the economic prospects, he sold the company to an American rival for £2m. This, however, went bankrupt during the Depression and Boots was then bought by a British group for £6m., and Jesse's son, John, became chairman. The famous No.7 cosmetics range was launched in the 1930s, and in the Second World War the factories produced both saccharin and penicillin. However, recently the company has been threatened by intense competition from supermarkets in its core pharmaceutical business.

2.10 Problems and Solutions

3 Practice A – Controlling carbon emissions

Problem: There is general agreement that rising levels of carbon dioxide (CO₂) in the earth's atmosphere, caused by burning fossil fuels, are contributing to global warming.

Solution A: It is argued that this trend can be reversed by generating energy from renewable sources, such as wind power or solar.

Argument against Solution A: However, these sources tend to be unreliable and are often more expensive than using oil or coal.

Solution B: An alternative approach is to increase energy efficiency, for example by insulating homes better, so that demand for energy is reduced.

Conclusion in favour of Solution B: Since this method is often quite cost efficient, it may prove to be more effective.

5 Practice B – University expansion

(Example argument)

Currently there is increasing demand for university places, which frequently leads to overcrowding of student facilities. It has been argued that fees should be increased to reduce demand for places, but this would discriminate against students from poorer families. Another proposal is for the government to pay for the expansion of universities, but against this is the view that this would unfairly benefit the minority, who in any case go on to earn higher salaries. A fairer solution might be for the government to subsidise the fees of the poorest students.

2.11 Punctuation

9 Practice A

- (a) The study was carried out by Christine Zhen-Wei Qiang of the National University of Singapore.
- (b) Professor Rowan's new book 'The End of Privacy' (2014) is published in New York.
or: Professor Rowan's new book *The End of Privacy* (2014) is published in New York.
- (c) As Keynes said: 'It's better to be roughly right than precisely wrong.'
- (d) Three departments, Law, Business and Economics, have had their funding cut.
- (e) As Cammack (1994) points out: 'Latin America is creating a new phenomenon; democracy without citizens.'
- (f) Thousands of new words such as 'app' enter the English language each year.
- (g) The BBC's World Service is broadcast in 33 languages including Somali and Vietnamese.
- (h) She scored 56 per cent on the main course; the previous semester she had achieved 67 per cent.

10 Practice B

The School of Biomedical Sciences at Borchester University is offering two undergraduate degree courses in Neuroscience this year. Students can study either Neuroscience with Pharmacology or Neuroscience with Biochemistry. There is also a Master's course that runs for four years and involves a period of study abroad during November and December. Professor Andreas Fischer is course leader for Neuroscience and enquiries should be sent to him via the website.

2.12 Singular or Plural?

1 Five areas of difficulty

- (a) . . . and disadvantages (e)
- (b) are vaccinated (a)
- (c) rural areas (c)
- (d) . . . in crime (b)
- (e) Each company has its own policy (d)

4 Practice A

- | | |
|---------------------|-------------------|
| (a) Little | (f) much advice |
| (b) businesses | (g) few interests |
| (c) experience/is | (h) civil war |
| (d) travel broadens | (i) Irons were |
| (e) Paper was | (j) work |

5 Practice B

companies have/websites/e-commerce/this is/businesses/companies/their/trouble/
security/expense/mean/these companies

2.13 Style

3 Practice A

(Example sentences)

- (a) Another factor to consider is the possibility of crime increasing.
- (b) Currently the rate of unemployment is high.
- (c) In the near future a vaccine for malaria may be discovered.
- (d) After 1989, the price of Japanese property fell sharply.
- (e) The numbers in that report are unreliable.
- (f) The severe inflation led to poverty and social unrest.
- (g) He was delighted to win the prize.
- (h) Students should be paid to study.
- (i) Women were enfranchised in 1987.
- (j) The main causes of the Russian Revolution were war and misgovernment.

4 Avoiding repetition and redundancy – fast food*(Example answer)*

Currently, fast food is growing in popularity. This is food that people can buy ready to eat or cook quickly. This essay examines its advantages and drawbacks. First, it is very convenient. Most people who work in offices are very busy, so they do not have time to go home for lunch. But they can eat in restaurants such as McDonald's. The second benefit is cheapness. As it is produced in large quantities, the companies can keep costs down. As a result, it is usually less expensive than a meal in a conventional restaurant.

5 Varying sentence length*(Example answer)*

Worldwide, enrolments in higher education are increasing. In developed countries, over half of all young people enter college, while similar trends are seen in China and South America. This growth has put financial strain on state university systems, so that many countries are asking students and parents to contribute. This leads to a debate about whether students or society benefit from tertiary education.

China is one developing country (but not the only one) that has imposed fees on students since 1997. The results have been surprising: enrolments, especially in the most expensive universities, have continued to rise steeply, growing 200 per cent overall between 1997 and 2011. It seems in this case that higher fees attract rather than discourage students, who see them as a sign of a good education. They compete more fiercely for places, leading to the result that a place at a good college can cost \$8,000 per year for fees and maintenance.

6 The use of caution*(Others are possible)*

Modals: might/may/could/should

Adverbs: often/usually/frequently/generally/commonly/mainly/apparently

Verb/phrase: seems to/appears to/in general/by and large/it appears/it seems

7 Using modifiers

- (a) The company's efforts to save energy were quite/fairly successful.
- (b) The survey was (a fairly/quite a) comprehensive study of student opinion.
- (c) His second book had a rather hostile reception.
- (d) The first year students were quite fascinated by her lectures.
- (e) The latest type of arthritis drug is rather expensive.

8 Practice B*(Example answers)*

- (a) Private companies are often more efficient than state-owned businesses.
- (b) Exploring space seems to be a waste of valuable resources.
- (c) Older students may perform better at university than younger ones.
- (d) Word-of-mouth is commonly the best kind of advertising.
- (e) English pronunciation can be confusing.
- (f) Some cancers may be caused by psychological factors.
- (g) It appears that global warming will cause the sea level to rise.
- (h) Most shopping may done on the Internet in 10 years' time.

2.14 Visual Information

1 Types of visuals

<i>Types</i>	<i>Uses</i>	<i>Example</i>
1 Diagram	d	E
2 Table	f	B
3 Map	a	F
4 Pie chart	c	D
5 Bar chart	b	C
6 Line graph	e	A

2 The language of change

- | | |
|----------------------------|-------------------------------------|
| (a) rose/increased | (f) rose/climbed/increased |
| (b) levelled off | (g) peak |
| (c) climbed/increased/rose | (h) fell/decreased/dropped/declined |
| (d) steadily | (i) sharply/steeply |
| (e) slightly | |

3 Describing visuals

- (A) (i) is better. It comments on the main features of the chart but does not repeat the statistics.
- (B) (a) density
 (b) demonstrates/illustrates/shows
 (c) between
 (d) less crowded/less densely populated
 (e) role/part
 (f) since/as/because
 (g) tend

5 Practice A

- (a) shows/illustrates
 (b) various/certain
 (c) between
 (d) majority
 (e) substantially/significantly
 (f) Spain
 (g) than

6 Practice B

(Example paragraph)

The table illustrates student evaluation of library facilities, contrasting undergraduate with graduate opinion. Most facilities are rated highly by both groups, especially the café and staff helpfulness. Both student groups are least satisfied with the availability of short loan stock. In most areas, graduates seem slightly more critical of facilities than undergraduates.

PART 3

3.1 Approaches to Vocabulary

2 Discussing language

Examples are provided in 3.

3 Practice

- | | |
|--------------------|---------------|
| (b) statement | (i) simile |
| (c) anecdote | (j) proverb |
| (d) saying | (k) synopsis |
| (e) euphemism | (m) slogan |
| (f) metaphor | (n) ambiguity |
| (g) understatement | (o) cliché |
| (h) paradox | |

4 Confusing pairs

- | | |
|-----------------|--------------|
| (a) principles | (e) its |
| (b) lose | (f) economic |
| (c) affect | (g) accepted |
| (d) compliments | |

3.2 Abbreviations

6 Practice

- (a) information and communications technology/higher education/and others
- (b) genetically modified/for example
- (c) that is/the World Trade Organisation
- (d) Note/curricula vitae/Human Resources
- (e) approximately/Before common era
- (f) The European Union/Value Added Tax
- (g) Doctor of Philosophy (thesis)/Tuberculosis/south east
- (h) Figure 4/world wide web
- (i) Vice-Chancellor/Postgraduate Certificate of Education
- (j) Public relations/approximately/\$75,000
- (k) With reference to/Annual General Meeting/as soon as possible
- (l) Professor/Master of Science/Master of Arts

3.3 Academic Vocabulary: Nouns and Adjectives

2 Nouns

(NB: Not all these words have close synonyms. This list is a guide to approximate meaning. Students should use a dictionary for a full understanding.)

accuracy – precision
 analysis – examination
 approach – angle of study
 assessment – test
 assumption – informed guess
 authority – expert
 category – type
 claim – argument
 controversy – debate
 correlation – link
 deterrent – disincentive
 emphasis – weight put on one area
 evidence – proof
 exception – different thing
 extract – part of a longer work
 ideology – belief

implication – unstated suggestion
 innovation – new introduction
 intuition – understanding without thinking
 motivation – incentive
 perspective – angle of study
 phenomenon – unusual event
 policy – formal guidelines
 preference – favourite choice
 process – series of stages
 proposal – suggestion
 provision – supply
 sequence – series of stages
 strategy – plan
 substitute – replacement
 technique – method
 validity – truth

- (a) evidence
- (b) suggestions
- (c) intuition
- (d) provision
- (e) claim

3 Using nouns and adjectives

<i>Noun</i>	<i>Adjective</i>	<i>Noun</i>	<i>Adjective</i>
approximation	approximate	particularity	particular
superiority	superior	reason	reasonable
strategy	strategic	synthesis	synthetic
politics	political	economy	economic/al
industry	industrial	culture	cultural
exterior	external	average	average
height	high	reliability	reliable
heat	hot	strength	strong
confidence	confident	truth	true
width	wide	probability	probable
necessity	necessary	length	long
danger	dangerous	relevance	relevant

4 Practice A

- (a) confident
- (b) particularities/strengths
- (c) probability
- (d) relevant
- (e) necessary
- (f) average
- (g) danger
- (h) necessity
- (i) unreliable
- (j) approximate
- (k) economic
- (l) synthesis

6 Practice B

- | | |
|---------------------------|--------------------------|
| (a) irrelevant | (e) relative |
| (b) subjective/irrational | (f) logical/rational |
| (c) Concrete/Relevant | (g) theoretical/abstract |
| (d) approximate/rough | (h) unambiguous |

7 Practice C

- | | |
|---------------------------|---------------------------------|
| (a) strategic – strategy | (f) theoretical – theory |
| (b) analytical – analysis | (g) frequent – frequency |
| (c) synthetic – synthesis | (h) critical – criticism/critic |
| (d) major – majority | (i) Social – society |
| (e) cultural – culture | (j) practical – practice |

3.4 Academic Vocabulary: Verbs and Adverbs**1 Understanding main verbs**

(Approximate synonyms)

- | | |
|----------------------------------|--------------------------|
| adapt = modify | hold = be true |
| arise = occur | identify = pick out |
| conduct = carry out | imply = suggest |
| characterise = have features of | interact = work together |
| clarify = explain | interpret = explain |
| concentrate on = look at closely | manifest = show |
| be concerned with = deal with | overcome = defeat |
| demonstrate = show | propose = suggest |
| determine = find | prove = turn out |
| discriminate = distinguish | recognise = accept |
| establish = found | relate to = link to |
| exhibit = show | supplement = add to |
| focus on = look at closely | undergo = experience |
| generate = create | yield = produce |

3 Practice A

(Some other verbs may be possible)

- (a) A admitted/accepted that he might have made a mistake . . .
- (b) B denied saying that women make better doctors than men.
- (c) C stated/claimed/argued that small firms are more dynamic than large ones.
- (d) D agreed with C's views on small firms.
- (e) E assumed/presumed that most people work for money.
- (f) F concluded that allergies are becoming more common.
- (g) G doubted that electric cars would replace conventional ones.
- (h) H hypothesised/suggested a link between crime and sunspot activity.

5 Practice B

(Other verbs may be possible)

- (a) L criticised/censured her research methods.
- (b) M identified/classified four main types of children in care.
- (c) N commended the company for its record for workplace safety.
- (d) O interpreted the noises whales make as expressions of happiness.
- (e) P identified/presented wind power and biomass as the leading green energy sources.
- (f) Q described/portrayed Darwin as the most influential naturalist of the nineteenth century.

7 Practice C

- (a) Clearly
- (b) Originally
- (c) Alternatively
- (d) Recently
- (e) Similarly
- (f) Clearly/crucially

3.5 Conjunctions

1 Types of conjunctions

- (a) A few inventions, for instance television, have had a major impact on everyday life.
 - (b) Furthermore, many patients were treated in clinics and surgeries.
 - (c) The definition of 'special needs' is important since it is the cause of some disagreement.
 - (d) The technology allows consumers a choice, thus increasing their sense of satisfaction.
 - (e) Four hundred people were interviewed for the survey, then the results were analysed.
 - (f) However, another body of opinion associates globalisation with unfavourable outcomes.
- (ii) Result (d)
 - (iii) Reason (c)
 - (iv) Opposition (f)
 - (v) Example (a)
 - (vi) Time (e)

2 Practice A – Biofuels

<i>Conjunction</i>	<i>Type</i>	<i>Conjunction</i>	<i>Type</i>
(a) such as	example	(f) in other words	example
(b) but	opposition	(g) instead of	opposition
(c) Although	opposition	(h) Consequently	result
(d) for instance	example	(i) and	addition
(e) however	opposition	(j) neither . . . nor	opposition

3 Common conjunctions

(Others are possible)

Addition: moreover/as well as/in addition/and/also/furthermore/plus

Result: therefore/consequently/so/that is why (see [Unit 2.2](#))

Reason: because/owing to/as a result of/as/since/due to (see [Unit 2.2](#))

Opposition: but/yet/while/however/nevertheless/whereas/albeit/although/despite

Example: such as/e.g./in particular/for instance (see [Unit 2.7](#))

Time: after/while/then/next/subsequently (see [Unit 3.10](#))

4 Practice B*(Others are possible)*

- | | |
|---------------------------------------|------------------------------|
| (a) After | (e) for instance/for example |
| (b) Although/While | (f) Due to/Because of |
| (c) moreover/furthermore/additionally | (g) While |
| (d) therefore/so | (h) As/Because/Since |

5 Practice C – Geoengineering*(Others are possible)*

- | | |
|------------------------------|---------------------------|
| (a) such as | (f) While/Although |
| (b) Although | (g) due to/because of |
| (c) either | (h) or |
| (d) or | (i) Therefore/That is why |
| (e) for instance/for example | |

6 Conjunctions of Opposition*(Example answers)*

- (a) (i) Although the government claimed that inflation was falling, the opposition said it was rising.
 (ii) The government claimed that inflation was falling while the opposition said it was rising.
- (b) (i) This department must reduce expenditure, yet it needs to install new computers.
 (ii) While this department must reduce expenditure, it also needs to install new computers.
- (c) (i) In spite of being heavily advertised, sales of the new car were poor.
 (ii) Sales of the new car were poor, despite it being heavily advertised.

7 Practice D*(Example answers)*

- (a) In contrast to America, where gun ownership is common, few Japanese have guns.
 (b) Despite leaving school at the age of 14, he went on to develop a successful business.
 (c) The majority displayed a positive attitude to the proposal, but a minority strongly disagreed.
 (d) While the tutor insisted that the essay was easy, the students found it difficult.
 (e) Although the spring was cold and dry, the summer was warm and wet.

3.6 Numbers**2 Percentages**

- (a) 50 per cent
 (b) 100 per cent
 (c) 400 per cent

3 Simplification

- (b) Scores of students applied for the scholarship.
 (c) He rewrote the essay several/a few times.
 (d) Last year, dozens of books were published on biogenetics.

- (e) Various names were suggested, but rejected, for the new chocolate bar.
- (f) The students thought of a few/several good topics for their project.

4 Further numerical phrases

(Example answers)

- (a) The price of petrol has increased tenfold since 1975.
- (b) Two-thirds of the students in the group were women.
- (c) The new high-speed train halved the journey time to Madrid.
- (d) The number of students applying for the Psychology course has risen by 50 per cent.
- (e) The number of visitors to the theme park doubled every year from 2007 to 2009.
- (f) More than twice as many British students as Italian students complete their first degree course.
- (g) Tap water is 700 times cheaper than bottled water.
- (h) The highest rate of unemployment is in Spain and the lowest in Norway.
- (i) 7 per cent of the computers produced had some kind of fault.
- (j) A majority of members supported the suggestion, but a large proportion of these expressed some doubts.

5 Practice

(Example answers)

- (b) There were twice as many sports at the Paris Olympics compared to the Athens games.
- (c) The number of athletes competing doubled between the Tokyo and Beijing Olympics.
- (d) In the Barcelona Olympics, nearly one-third of the athletes were women.
- (e) The number of Olympic sports rose threefold between 1896 and 2008.
- (f) The number of events has risen steadily over the last century.
- (g) A substantial minority of athletes at the Beijing Olympics were women.

3.7 Prefixes and Suffixes

2 Prefixes

auto	by itself	over	too much
co	together	poly	many
ex	(i) previous	post	later
	(ii) outside	re	again
fore	in front	sub	below
inter	between	trans	across
macro	large	under	(i) below
micro	small		(ii) not enough
multi	many		

3 Practice A

- (a) social class at bottom of society
- (b) more tickets sold than seats available
- (c) very local climate
- (d) economy based on information not production
- (e) not listed in the telephone book
- (f) disappointed

5 Practice B

- (a) noun – withdrawal of a service
- (b) adjective – two related events at the same time
- (c) adverb – without cooperation
- (d) adjective – related to evolution
- (e) noun – person who protests
- (f) adjective – not able to be forecast
- (g) adjective – able to be sold
- (h) noun – person being interviewed
- (i) noun – belief that increasing consumption benefits society
- (j) adverb – in a way that suggests a symbol

6 Practice C

- (a) joint production/junior company
- (b) without choosing to/not hurt
- (c) able to be refilled/clear and obvious
- (d) cannot be provided/unusual
- (e) failure in communication/new order

3.8 Prepositions**1 Using prepositions**

purpose of/development of/in Catalonia/over the period/contributed to/valuable for/
In conclusion/sets out/relationship between/decline in/supply of/in the factory context

Verb + prep = contributed to

Adj + prep = valuable for

Phrasal verb = sets out

Place = in Catalonia/in the factory context

Time = over the period

Phrase = In conclusion

2 Practice A

- | | |
|-----------------------------|--------------------------|
| (b) adjective + preposition | (f) phrase |
| (c) verb + preposition | (g) preposition of place |
| (d) preposition of place | (h) preposition of time |
| (e) noun + preposition | |

3 Prepositions and nouns

- | | | |
|--------|--------|--------|
| (a) of | (c) of | (e) in |
| (b) in | (d) to | (f) on |

4 Prepositions in phrases

- | | | |
|--------|--------|--------|
| (a) on | (d) in | (g) in |
| (b) of | (e) of | (h) of |
| (c) of | (f) on | |

5 Prepositions of place and time

- | | |
|---------------------------|-------------------|
| (a) Among | (e) in, at |
| (b) from, to/between, and | (f) on, between |
| (c) in, of | (g) around, of/on |
| (d) in, in | |

6 Practice B

- | | | |
|--------------|-------------|-------------|
| (a) out | (f) from/in | (k) between |
| (b) of | (g) between | (l) in |
| (c) in/to | (h) in | (m) in |
| (d) to/in | (i) of | (n) of |
| (e) among/in | (j) in/over | (o) to/in |

8 Practice C

- | | |
|--------------------------------|------------------|
| (a) focused on/concentrated on | (e) divided into |
| (b) pointed out | (f) blamed for |
| (c) specialising in | (g) believed in |
| (d) associated with | |

3.9 Synonyms**1 How synonyms work**

<i>Word/phrase</i>	<i>Synonym</i>
oil	hydrocarbon
company	firm
in the world	global/internationally
people	employees

2 Common synonyms in academic writing

(NB: Some of these pairs are approximate synonyms)

<i>Nouns</i>		<i>Verbs</i>	
area	field	accelerate	speed up
authority	source	achieve	reach
behaviour	conduct	alter	change
beliefs	ethics	analyse	take apart
benefit	advantage	assist	help
category	type	attach	join
component	part	challenge	question
concept	idea	claim	suggest
controversy	argument	clarify	explain
drawback	disadvantage	concentrate on	focus on
expansion	increase	confine	limit

<i>Nouns</i>		<i>Verbs</i>	
feeling	emotion	develop	evolve
framework	structure	eliminate	remove
goal	target	evaluate	examine
hypothesis	theory	found	establish
interpretation	explanation	maintain	insist
issue	topic	predict	forecast
method	system	prohibit	ban
option	possibility	quote	cite
quotation	citation	raise	increase
results	findings	reduce	decrease
statistics	figures	respond	reply
study	research	retain	keep
trend	tendency	show	demonstrate
output	production	strengthen	reinforce

3 Practice A

(Others are possible)

- Professor Hicks challenged the results of the study.
- The figures demonstrate a steady increase in applications.
- The institute's forecast has caused a major debate.
- Cost seems to be the principal disadvantage to that method.
- They will focus on the first possibility.
- After the lecture, she tried to explain her theory.
- Three topics need to be evaluated.
- The structure can be kept, but the aim needs to be modified.
- OPEC, the oil producers' cartel, is to reduce output to increase global prices.
- The tendency to smaller families has accelerated in the last decade.

4 Practice B

UK – British – this country

agency – organisation – body

advertising campaign – publicity programme – advertising blitz

to raise – to improve

to cut – reduction

before eating – prior to meals

5 Practice C

(Example answers – others possible)

build/make vehicles

car makers

principal problem

obstacle

automobile producers

challenges

forecast

3.10 Time Markers

3 Practice A

- | | | |
|--------------|----------------|------------|
| (a) Recently | (d) Last month | (f) Since |
| (b) until | (e) by | (g) During |
| (c) for | | |

4 Practice B

- | | | |
|---------------|-----------|-------------------|
| (a) Last | (d) for | (g) until |
| (b) During/On | (e) ago | (h) Currently/Now |
| (c) By | (f) later | |

5 Practice C – Eating out

- | | | |
|-------------|---------------|-----------|
| (a) In/Over | (d) recently | (f) by |
| (b) Since | (e) Currently | (g) since |
| (c) ago | | |

6 Practice D – Napoleon

(Example answer)

Napoleon entered military school at the age of 15, five years before the French Revolution began. In 1793, he was promoted to brigadier-general, and when only 27 he became commander of the army in Italy, and also married Josephine. On his return from Egypt in 1799, he became the First Consul of France, and by 1807 France was in control of most of Europe. Three years later, he divorced Josephine and married Marie-Louise, the Austrian emperor's daughter. But in 1812 Napoleon and his army were forced to retreat from Russia, and in 1814 he was exiled to Elba. After his defeat at the battle of Waterloo a year later, he was again exiled, to St Helena, where he lived until his death in 1821.

PART 4

4.1 Case Studies

1 Using case studies

A case study has the advantage of providing a concrete experience/example.

The disadvantage is that it is limited in place and time.

<i>Topics</i>	<i>Case studies</i>
Methods of teaching dyslexic children	An experimental approach to reading difficulties with under-8s in Singapore
Improving crop yields in semi-deserts	Using solar power to operate irrigation pumps in Ethiopia
Reducing infant mortality	A programme to cut smoking among pregnant women in a Greek clinic
Building earthquake-resistant bridges	The lessons from Chile – how three structures withstood the 2010 quake

<i>Topics</i>	<i>Case studies</i>
Dealing with reoffending among prisoners	Work and learning – how a Brazilian scheme encouraged convicts to stay out of jail
Improving recycling rates in large cities	The Berlin experiment: increasing public participation in collecting and sorting waste

2 Model case study

(Additional answers are possible here)

- (a) Store layouts match Chinese apartments
 - Products linked to New Year celebrations
 - Reduced prices by sourcing production locally
 - Produces thinner but more frequent catalogues
 - Uses local characters in adverts
 - Attempts to provide better service
- (b) Competition from rivals offering free delivery
 - Some products (e.g. single beds) not suited to Chinese tastes
- (c) More financial details of IKEA's sales and profits in the Chinese market

4.2 Literature Reviews and Book Reviews

2 Example literature review

- (a) 2 (content and process)
- (b) 7
- (c) 5
- (d) It is more convenient to use secondary sources in this kind of short literature review. If you were studying just one of these theorists (e.g. Herzberg), you might be expected to use primary sources.

4 Model book review

The reviewer might have said what level of reader would benefit from reading the book (e.g. undergraduate/Master's/PhD).

4.3 Longer Essays

2 Example essay

- (a) The writer appears to be in favour of nuclear energy.
- (b) The writer presents the arguments against nuclear power and attempts to show their weakness. In the conclusion, the writer summarises his or her position ('nuclear energy can be seen . . . fossil fuels').

3 Revision

(Example answers)

- (a) See Paragraph 1.
- (b) 'This essay attempts to assess the risks of using nuclear power, in comparison with other sources of energy'.
- (c) 'The main arguments for employing nuclear energy are first considered, followed by an examination of the safety issues around this source of power, including the safety and security concerns connected with nuclear waste'.
- (d) '... alternative energy sources to fossil fuels i.e. oil, gas and coal ...'
- (e) 'Wind energy and solar power are frequently presented as alternative energy sources to fossil fuels'.
- (f) 'Mtoe (million tons of oil equivalent)'
- (g) '... since the Chernobyl accident in 1986 there has been persistent concern ...'
- (h) 'As a result, the demand for total primary energy, which will accompany the population growth, is projected to increase ...'
- (i) power
- (j) 'If this increase occurs the total global stock of oil and gas would only be adequate for 250 years ...'
- (k) 'It is estimated that in 2003, in the USA, nuclear energy prevented the release of 680 million tons of CO₂ ...'
- (l) 'However, its opponents argue that it can damage the environment by creating radioactive waste'.
- (m) Bodansky (2004)
- (n) 'Lillington (2004) suggests that the cost of purchasing fuel for nuclear energy is likely to remain low compared to other energy sources ...'

4.4 Reports

2 Essays and reports

- 1 Essay
- 2 Report
- 3 Report
- 4 Report/essay
- 5 Essay

3 Practice

Introduction

- (a) Due to the recent closure of the maintenance depot, a site approximately 250 metres long and 100 metres wide has recently become vacant on the west side of the university campus.
- (b) The aim of the redevelopment is to improve facilities for both staff and students, and at the same time enhance the appearance of this part of the campus.
- (c) Two alternatives schemes for redevelopment have been put forward, as can be seen in Plans A and B above.
- (d) This report attempts to compare the two schemes on this basis and to establish which is the more suitable.
- (e) The report takes into account a consultation exercise with staff and students carried out last autumn.

(Example report)

Proposals

The central feature of Plan A is a circular park area in the middle of the site, which would contain trees and seating. On one side of this is a small car park, with space for 20 vehicles. On the other side is a block of tennis courts. The alternative, Plan B, provides a larger car park along the side next to the Access Road, with spaces for 50 cars. The other half of the site contains a building housing a café and a range of shops, while at the other end is a swimming pool.

Discussion

Clearly the two proposals offer quite different amenities. Plan A provides some green space for relaxation, along with tennis courts and a limited amount of parking. It is a relatively low-key scheme that could be completed quite cheaply. In contrast, Plan B would be more expensive, but would also offer catering and sporting facilities, as well as extra parking.

Recommendations

It can be argued in favour of Plan B that a swimming pool would have wider appeal than tennis courts, and also that there is a severe shortage of parking on the campus. However, it is not clear that more shops and a café are really needed for the university, and few students actually drive cars. Plan A would also do more to improve the look of the campus by increasing the green space. In view of these considerations, the university should perhaps consider combining the best of both plans, and replace the tennis courts in Plan A with a swimming pool.

4.5 Surveys

1 Conducting surveys

(Other suggestions possible/in any order)

To test a hypothesis

Get up-to-date data

Collect information about the behaviour of a specific group

2 Questionnaire design

- (a) (ii) is less embarrassing for most people to answer.
- (b) (i) is an open question and has many possible answers. (ii) is a closed question with a limited range of responses.
- (c) For casual interviews, ten is probably the maximum most interviewees will cope with.

3 Survey language

- | | |
|------------------------------|---------------|
| (a) conducted | (h) majority |
| (b) random | (i) slightly |
| (c) questionnaire | (j) minority |
| (d) questioned | (k) questions |
| (e) respondents/interviewees | (l) common |
| (f) Interviewees/Respondents | (m) generally |
| (g) mentioned | (n) sample |

4 Question forms

(Example questions. 3–6 could use present tense.)

- Q2 Why did you take a job?
 Q3 What effect did the work have on your studies?
 Q4 What kind of work did you do?
 Q5 What hours did you work?
 Q6 How much did you earn?
 Q7 Do you have any comments on your work?

5 Tenses

- (a) past tense
 (b) present tense (the survey is completed but the results are still valid)

TEST YOUR PROGRESS**Describing a process: writing an essay**

(Other answers may be possible)

- | | |
|-------------------------------------|---------------------------|
| (a) stage/part/step | (j) be |
| (b) the/its | (k) taking |
| (c) for | (l) you |
| (d) Secondly/Then | (m) checking/ensuring |
| (e) and | (n) After |
| (f) critically/rigorously/carefully | (o) maximum |
| (g) which | (p) to |
| (h) skills/techniques | (q) tables/graphs/figures |
| (i) answer | (r) should/must |

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