

## A

## Introducing a problem

Note the way words are combined in these extracts from academic articles.

As the mining operations became deeper and deeper, **the problem of flooding arose**<sup>1</sup>.

In a recent survey, 34% of customers **experienced difficulties** with online buying.

Walsh's paper discusses the **controversy**<sup>2</sup> surrounding privatisation of health services.

Conservation driven by market forces seems to be a **contradiction in terms**<sup>3</sup>.

The topic is inadequately treated, and several errors are **apparent**<sup>4</sup> in the analysis.

Integrating the new member states **poses**<sup>5</sup> a challenge to the European Union.

The research **raises**<sup>6</sup> the issue of rainforests and the people who live in them.

The patient had **difficulty in remembering** very recent events.

Most theories of the origin of the universe **contain inconsistencies**<sup>7</sup>.

The results revealed **shortcomings**<sup>8</sup> in the design of the questionnaire.

<sup>1</sup> *question/issue/difficulty/controversy* also often combine with *arise* <sup>2</sup> a lot of disagreement or argument about something <sup>3</sup> a combination of words which is nonsense because some of the words suggest the opposite of some of the others <sup>4</sup> can be seen <sup>5</sup> *threat/problem/danger* also are often used with *pose*; the verb *present* can also be used with these nouns <sup>6</sup> *question/problem* also are often used with *raise* <sup>7</sup> if a reason, idea, opinion, etc. has inconsistencies, different parts of it do not agree <sup>8</sup> faults or a failure to reach a particular standard

## B

## Responding to a problem

verb	noun	example	meaning
react	react/ reaction	It was a study of how small firms <b>react to</b> the problem of over-regulation.	act in a particular way as a direct result of
respond	response	The Minister's <b>response to</b> the problem of inflation was to impose a price freeze.	his/her reaction to what has happened or been said or done
deal with		How should training courses <b>deal with</b> the issue of violence in the healthcare setting?	take action in order to solve a problem
tackle		Governments do not seem to be able to <b>tackle</b> the problem of urban congestion.	try to deal with
address		Governments need to <b>address</b> the problem of waste from nuclear power plants.	(formal) give attention to or deal with
mediate	mediation	The community leaders attempted to <b>mediate between</b> the police and the people.	talk to the two groups involved to try to help them find a solution to their problems

## C

## Solving a problem

The researchers solved the problem by increasing the temperature.

The team came up with / found a solution to the problem of water damage.

By using video, the researchers overcame the problem of interpreting audio-only data.

The two governments finally **resolved**<sup>1</sup> the problem of sharing water resources. A successful **resolution**<sup>2</sup> to the crisis came in 1998.

The **answer** to the problem lay in changing the design of the experiment.

The book was entitled: 'Conflict Resolution: the Management of International Disputes'.

<sup>1</sup> (more formal) solved or ended <sup>2</sup> noun form of the verb

## Exercises

### 45.1 Match the beginning of each sentence with the most appropriate ending.

- |   |   |
|---|---|
| 1 Students always seem to have difficulty         | surrounding the President.              |
| 2 Ford pointed out that the methodology had       | apparent.                               |
| 3 The need to find replacement fuels poses        | some important questions for the Party. |
| 4 The media continue to focus on the controversy  | many difficulties.                      |
| 5 In the figures he presented several errors were | arose fairly recently.                  |
| 6 On their way across Antarctica they experienced | in remembering this formula.            |
| 7 The results of the opinion poll raise           | a number of inconsistencies.            |
| 8 Problems caused by pollution in this area       | considerable challenges for scientists. |

### 45.2 There is a preposition missing in each of these sentences. Add it in the right place.

- 1 It is no easy task mediating unions and management.
- 2 In this lecture I plan to deal the later novels of Charles Dickens.
- 3 The answer to most problems in agriculture lies the soil.
- 4 He thought for a long time but was unable to come with a solution.
- 5 Green tourism may initially feel like a contradiction terms.
- 6 I wonder what the professor's reaction the article will be.
- 7 The company has experienced a number of difficulties the computer operating system.
- 8 Have you found a solution the problem yet?

### 45.3 Complete these tables. Use a dictionary to help you if necessary.



noun	verb
	solve
reaction	
	contain
error	

noun	verb
resolution	
	respond
contradiction	
	mediate

### 45.4 Choose one of the words from the tables in 45.3 to complete each sentence. You may need to change the form of the verbs.

- 1 The professor was very angry when the student ..... him so rudely and so publicly.
- 2 As the saying goes, to ..... is human – we all make mistakes.
- 3 I hope someone will eventually come up with a ..... to the problem of global warming.
- 4 The diplomats are hoping to ..... between the two sides and so prevent a conflict.
- 5 The library ..... many rare and beautiful books.
- 6 I am still waiting for the committee's ..... to my request for an extension for my dissertation.
- 7 At the beginning of the new academic year Marie ..... to make much more effort with her assignments.
- 8 The lecturer ..... very angrily when I questioned one of her conclusions.

**FOLLOW UP**

Much academic work is based on asking questions or raising problems and finding solutions to them. Find an article relating to your own discipline which discusses a problem. Note down any interesting vocabulary that you find there.

## Describing situations

### A Existence and location

Look at these extracts from history lectures. Note the words in bold.

The existence of a large population of migrant workers put pressure on the country's **infrastructure**<sup>1</sup>.

Historians noted the **absence**<sup>3</sup> of a clear political ideology in the actions of the workers.

We need to look at all the **circumstances**<sup>2</sup> surrounding the events of 1926.

Looking at events in their social context means taking **all** the factors of a person's social environment into account.

The conditions in which the poorest sector of the population lived were bad.

The **status**<sup>4</sup> of women was not a serious subject of debate until the 1960s.

<sup>1</sup> basic systems and services, such as transport and power supplies <sup>2</sup> facts or events that make the situation the way it is <sup>3</sup> opposite = *presence* <sup>4</sup> official position, especially in a social group

### B Factors affecting situations

(n) = noun (v) = verb (adj) = adjective (opp) = opposite

word	examples	notes
constrain (v) constraint (n)	Scientists are <b>constrained</b> by the amount of funding they can obtain / are <b>subject to the constraints</b> of funding.	being controlled and limited in what they can do
restrain (v) restraint (n)	Growth in car ownership could be <b>restrained</b> by higher taxes. High land prices are a <b>restraint</b> on the expansion of private housing in the city.	limiting the growth or force of something
minimum (n/adj) (opp) maximum minimal (adj)	The <b>minimum/maximum</b> temperature was recorded at each stage. Damage to buildings was <b>minimal</b> .	smallest/largest amount allowed or possible very small in amount
confine (v)	Major industrial pollution is <b>confined</b> to the big cities in the north of the region.	limited to
restrict (v) restriction (n)	The government took measures to <b>restrict</b> the sale of tobacco products to young people. To fight traffic congestion, the city <b>imposed a restriction</b> of one car per household.	limiting something and reducing its size or preventing it from increasing
intrinsic (adj) (opp) extrinsic	English language is an <b>intrinsic</b> part of the college curriculum.	extremely important and basic characteristic of it
integral (adj)	Users' experiences are <b>integral</b> to the way libraries measure their performance.	necessary and important as a part of a whole
finite (adj) (opp) infinite	Oil is a <b>finite</b> resource; it will run out one day. There is evidence to suggest the universe is <b>infinite</b> .	having a limit or end /'faɪnaɪt/ having no limit or end /'ɪnfɪnaɪt/
stable (adj) (opp) unstable stability (n) (opp) instability	It takes decades to create a <b>stable</b> democracy. Political <b>instability</b> is a threat to the whole region.	if something is stable, it is firmly fixed or not likely to move or change

## Exercises

### 46.1 Choose one of the words in bold in A to complete each sentence.

- 1 To understand the problem, we need to look at all the many factors which may influence development in the child's social and physical .....
- 2 It has been claimed that the ..... of teaching as a profession is not as high as it used to be or as it should be.
- 3 The infrared aerial photograph seems to show the ..... of a large village around 1,000 years ago.
- 4 The company's president died in rather suspicious ..... and his son took over.
- 5 In the ..... of any clear instructions from above, I think we should decide ourselves how to proceed.
- 6 The country can never become a major economic player unless it improves its .....
- 7 I can't tell you what the word means unless you tell me it in .....
- 8 Students today live in very luxurious ..... compared with students in the past.

### 46.2 Change the words in bold to the *opposite* meaning.

- 1 The economy has been stable for several years.
- 2 Stability has been a feature of government in the country for the last decade.
- 3 The northern region possesses an apparently finite supply of uranium.
- 4 The presence of cholera in the area was noted by scientists in 1978.
- 5 A minimum temperature of 20 degrees must be maintained at all times.

### 46.3 Rewrite the sentences without changing the meaning, using the word in brackets.

- 1 In the 1960s the government restricted the amount of money you could take out of the country. (RESTRICTION)
- 2 The problem exists only in the capital city. (CONFINED)
- 3 All fossil fuels will run out one day. (RESOURCES)
- 4 In the accident there was very little damage to the car. (MINIMAL)
- 5 All research is constrained by funding decisions. (SUBJECT)
- 6 The fact that the country is socially unstable deters investors. (SOCIAL)
- 7 Normally we would not behave in this way. (CIRCUMSTANCES)
- 8 Most small children believe that fairies exist. (OF FAIRIES)

### 46.4 Choose the best word in *italics* to complete each sentence.

- 1 The government has introduced legislation to *restrict* / *constrain* smoking in public places.
- 2 Learning from your mistakes is an *infinite* / *intrinsic* part of making progress.
- 3 Her attempt to *confine* / *restrain* the children from making a noise in the library met with little success.
- 4 The professor always insists that even the most junior research associate is an *unstable* / *integral* part of the team.
- 5 What are the *minimum* / *minimal* requirements for getting a place on the course?
- 6 During the exam period restrictions are *posed* / *imposed* on visitors to the college.
- 7 There were some rather curious *circumstances* / *contexts* surrounding the case.
- 8 The level of taxation in the country is a major *constraint* / *restraint* on foreign investment there.

**FOLLOW  
UP**

Find a news article about a scientific development and read the description of the situation which led to it (often to be found in the introduction). Note any useful general nouns used there.



# Describing change

## A Historical changes and their effects

The transition<sup>1</sup> from agriculture to industry challenged the economic and political status quo<sup>2</sup> in many countries. Millions of people abandoned<sup>3</sup> villages and rural areas and moved into cities. The shift<sup>4</sup> away from self-sufficiency meant most people became dependent on large corporations in one way or another, and had to adapt<sup>5</sup> to new social environments and adjust<sup>6</sup> to new ways of doing things. The move<sup>7</sup> towards smaller, nuclear families brought about fundamental<sup>8</sup> changes in family patterns in many parts of the world. Maintaining<sup>9</sup> the old ways became increasingly<sup>10</sup> difficult. On the other hand, the elimination<sup>11</sup> of diseases such as smallpox transformed<sup>12</sup> millions of people's lives, and the expansion<sup>13</sup> of healthcare in many countries saved countless lives. Technology enhanced<sup>14</sup> most people's lives in some way. For many people, nonetheless, the negative impact<sup>15</sup> of technology on the environment altered<sup>16</sup> the way we think of our relationship with nature, and sustainable<sup>17</sup> development, rather than development for its own sake, became an important goal for a number of countries.

<sup>1</sup> change from one form to another   <sup>2</sup> the situation as it was at that time   <sup>3</sup> left for ever   <sup>4</sup> change in position or direction   <sup>5</sup> change to suit different conditions   <sup>6</sup> become more familiar with a new situation   <sup>7</sup> action taken to achieve something   <sup>8</sup> in a very basic way   <sup>9</sup> not allowing them to change   <sup>10</sup> more and more   <sup>11</sup> removal of   <sup>12</sup> changed completely so that they are better   <sup>13</sup> increase in size or extent   <sup>14</sup> improved the quality of   <sup>15</sup> powerful effect that something, especially something new, has on a situation   <sup>16</sup> changed (usually slightly)   <sup>17</sup> causing little or no damage to the environment and therefore able to continue for a long time

## B More verbs for describing change

The exchange rate between the euro and the dollar has fluctuated recently. [changed or varied, especially continuously and between one level and another]

The technicians modified the flow of oil through the engine. [changed it slightly to improve it]

The company's lawyers amended the contract to take account of the new situation. [changed the words of a text, typically a law or a legal document]

Seven power plants were converted from oil to gas. [caused to change in form or character]

After 20 years of trading in the US, the firm transferred their operations to Brazil. [moved]

The economy recovered after three years of depression. [returned to a satisfactory condition]

Oil supplies are diminishing rapidly. Acquiring new supplies is vital for many countries. [becoming less; (formal) obtaining, getting]

We need to refine our analysis to obtain more accurate results. [improve it, especially by removing unwanted material]

The government relaxed controls on imports in 1997. [make less strict or severe]

Plans have been drawn up to restore 50,000 acres of wetland to their former state. [return something or someone to an earlier good condition or position]

## C Adjectives which often describe change

There was a gradual change in attitudes in the 1980s. [slow, over a long period of time]

A sudden change in the temperature of the liquid occurred after some minutes.

There is a marked change in how people perceive antisocial behaviour. [very noticeable]

There was no perceptible change in the learning outcomes between Time 1 and Time 2. [which could be perceived, i.e. noticed or seen]



A change in and a change of are different. A change in temperature/behaviour/attitudes/composition/policy, etc. suggests a process where something has become different (e.g. smaller, more radical). A change of clothing/government/approach, etc. means the complete substitution of one thing for another.

## Exercises

### 48.1



Fill in the missing words in each sentence with a word formed from the same root as the word in brackets. You may need a dictionary to help you with items 7 to 10.

- 1 There has been an enormous ..... in aviation in recent years. (EXPAND)
- 2 Economists are increasingly concerned that development should be ..... . (SUSTAIN)
- 3 There has been no ..... change in the patient's condition. (PERCEIVE)
- 4 The survey found that most people feel that modern life is becoming ..... difficult. (INCREASE)
- 5 Industrial ..... has, of course, transformed people's working lives. (DEVELOP)
- 6 The group's aims include the ..... of famine and poverty. (ELIMINATE)
- 7 The apparatus worked well after we had made some ..... to it. (MODIFY)
- 8 With increasing unemployment many people have had to make ..... to their lives. (ADJUST)
- 9 Many linguists have studied first language ....., or how people learn their mother tongue. (ACQUIRE)
- 10 There is unlikely to be any ..... of controls in the near future. (RELAX)

### 48.2

Answer these questions about the language in this unit.

- 1 If prices *fluctuate* what do they do?
- 2 If a disease is *eliminated* how much of it remains?
- 3 If interest in something is *diminishing* is it becoming less or more?
- 4 If there is a *marked* change in someone's behaviour is it a big or a small change?
- 5 If most people feel that mobile phones *enhance* their lives, do they feel that their lives have become better or worse?
- 6 If controls on imports are *relaxed* do they become more or less strict?

### 48.3

Choose the best word in *italics* to complete each sentence.

- 1 The economy now seems to be *recovering* / *amending*.
- 2 Many people now are *converting* / *transforming* to using solar power.
- 3 Our survey did not succeed in getting all the information we need and so we shall have to *diminish* / *refine* our questions a little.
- 4 Why do some people *abandon* / *shift* their families and disappear without a word?
- 5 It takes most people some time to *alter* / *adjust* to living in a new country.
- 6 In recent years most societies have seen a major change in the *transition* / *status quo*.
- 7 It is increasingly hard to *adapt* / *maintain* traditions in the face of progress.
- 8 There have been some attempts to *restore* / *alter* the environment to its original state.

### 48.4

Which preposition is needed to complete each phrase?

- 1 a change ..... the climate
- 2 to transfer money ..... a Swiss bank account
- 3 a shift ..... the countryside towards the towns
- 4 to have an impact ..... the cost of living
- 5 to relax controls ..... immigration
- 6 to adjust ..... changes
- 7 the transition ..... one period to the next
- 8 to adapt ..... a new way of life