

EVALUATIONS AND EMPHASIS

A Adjectives for evaluating: opening sentences from science articles

The first **comprehensive**¹ survey of coral reefs is being carried out in the Indian Ocean.
Fundamental² problems exist in current theories of the universe, a physicist claims.
A **ground-breaking**³ discovery has been made in research into ageing and death.
Important new information about the planets has been gained from the *Orbis* space probe.
Working hours have increased and pressures at work have become more **intense** in the UK.
A **crucial** stage in global warming could be reached within ten years, scientists say.
The search for a unified theory of the human mind is **misguided**⁴, says a psychologist.
The discovery of a dinosaur-like bone fossil in Africa is **unique**, according to scientists.
In 1997, Irkan published a **significant** piece of research on open structures in bridges.
Current responses to the global energy crisis are **inadequate**, a scientist has warned.

¹ complete, including everything that is necessary ² basic, from which everything else originates
³ very new and a big change ⁴ based on bad judgement or on wrong information or beliefs

B Teachers' evaluations of student assignments

- Good! The only criticism I have is that there is a **notable**¹ lack of key references to work before 1990. You should have **given credit to**² earlier work by Wilson and Healey.
- I am concerned about the **validity**³ of some of your analysis, and as a result, some of your conclusions may be **invalid**. **Significantly**, you had problems in Section C.
- I don't think the two different analyses you did are **compatible**⁴. **It is not surprising that** you had problems matching the two results, which **could be viewed as almost contradictory**.
- There are some **solid**⁵ arguments in Section A, but I think your conclusion in B is **mistaken** and lacks **hard**⁶ evidence. Your data are* **rather limited**. [*may also sometimes be *is*]

¹ important and deserving attention ² stated the importance of ³ basis in truth or reason ⁴ able to exist successfully together ⁵ of a good standard; giving confidence or support ⁶ clear, able to be proven

C Other evaluative expressions

It is **noteworthy that** Holikov (1996) also had difficulty explaining the phenomenon.
It is **worth recalling that** three previous studies failed to find a link between the two events.
We should **recognise/acknowledge** how difficult it is to interpret these data.
These results are **borne out by**¹ two other studies: Hermann (1998) and Wilson (2001).
In his **seminal**² work, Abaka **challenges**³ current techniques, revealing **flaws**⁴ in data interpretation.

¹ confirmed, shown to be true ² containing important new ideas, very influential ³ questions whether they are correct ⁴ faults, mistakes or weaknesses; we can say a method is *flawed* (adj)

D Emphasising

The research **underlined/highlighted** the need for a new social policy for childcare.

- When used at the beginning of a sentence for extra emphasis, negative expressions are followed by inversion of the subject and verb. A form of *do* is used when there is no other auxiliary or modal verb.

Under/In no circumstances / On no account is it right to video people without consent.

Seldom/Never (before)/Rarely in the history of Europe has there been such a crisis.

In no way / By no means does this new study invalidate existing studies.

Only in 1985 did the government accept that something needed to be done urgently.

49.1 Look at A and answer the following questions about the adjectives there.

- 1 Which two adjectives have negative associations?
- 2 Which adjective sounds most positive and exciting?
- 3 Which two words can be quite close synonyms and could be used, for example, in the phrase *to play a(n) _____ role in the development of?*
- 4 Which word has a similar meaning to the adjectives in 3 but is stronger or more extreme?
- 5 Which word means *the only one of its type?*

49.2 Choose the best words from the box to complete each of these sentences.

acknowledged	borne	challenged	credit	crucial
evidence	flawed	flaws	ground-breaking	
limited	mistaken	seminal	validity	viewed

- 1 Nierinck gave _____ to the input of her research associates and _____ that they had played a _____ role in the project.
- 2 Unfortunately, these results are not _____ out by other work in the field and you are _____ to claim that there is hard _____ to support your theory. There are _____ in some of your calculations, and they need redoing.
- 3 Herbert _____ Evensson on the _____ of his conclusions claiming that his data were _____ and were too _____ to be reliable.
- 4 This superb article can be _____ as a _____ piece of work which has made _____ discoveries about the nature of cancerous cells.

49.3 Rewrite these sentences beginning in the way indicated.

- 1 It is by no means certain that all the students will pass their final exams.
By no means _____
- 2 Never before had he taught such an outstanding student.
He _____
- 3 The country has rarely witnessed such a display of public feeling.
Rarely _____
- 4 In no way will we be able to halt the process of global warming.
We _____
- 5 Students will not be allowed to defer the completion of their thesis longer than one month under any circumstances.
Under no circumstances _____
- 6 We will only know the answer when we gather a lot more data.
Only when we _____

49.4 Rearrange the letters to make the word that fits the sentence.

- 1 The study _____ the need for more research. SHHHLTIGG
- 2 I don't find your arguments either _____ or convincing. DOILS
- 3 Unfortunately, the two studies came up with results which were not _____ . ABCELIMOPT
- 4 She wrote the first _____ study of this _____ period of Athenian history. OIRCPMEENHVES / YEK
- 5 It is _____ that his work was initially criticised for being too _____ . TROWH / LLARIGNEC / IMITLDE
- 6 The article _____ the importance of literacy and numeracy skills in early education. DLSIUENREN

DESCRIBING RESEARCH METHODS

A Useful word combinations

We may carry out a **procedure** or an **experiment** or a **pilot study**. [preliminary study]

We use or, more formally, employ a **method** or a **technique** or an **approach** or an **instrument** or a **device**. [an object or method used for a special purpose] You can also **use** or **employ** any particular type of research **methodology**.

Apparatus [equipment for a lab experiment] is **assembled** and **checked**. *Apparatus* is an uncountable noun but you can talk about a **piece of apparatus**.

B Types of research method

research method	what the researcher does	limitation of method
experimental study	manipulates ¹ a variable [anything that can vary] under highly controlled conditions to see if this produces [causes] any changes in a second [dependent] variable	done in the highly controlled setting of the laboratory – these conditions are artificial ² and may not reflect what happens in the infinitely more complex real world; other researchers often try to replicate ³ successful experiments
correlational study	attempts to determine the relationship between two or more variables , using mathematical techniques for summarising data	only shows that two variables are related in a systematic way , but does not prove or disprove ⁴ that the relationship is a cause-and-effect relationship
naturalistic (empirical) observation (also known as field study)	observes and records some behaviour or phenomenon ⁵ , often over a prolonged period, in its natural setting without interfering with ⁶ the subjects or phenomena in any way	can be very time-consuming as researcher may have to wait for some time to observe the behaviour or phenomenon of interest; difficult to observe behaviour without disrupting ⁷ it
survey	makes inferences from ⁸ data collected via interviews or questionnaires	intentional deception, poor memory, or misunderstanding of the question can all contribute to inaccuracies in the data
case study	keeps in-depth ⁹ descriptive records, as an outside observer , of an individual or group	often involves only a single individual as the subject of the study and this person may not be representative ¹⁰ of the general group or population

¹ makes changes to ² not natural ³ do in exactly the same way ⁴ show something is not true ⁵ something that exists and can be

seen, felt, tasted, etc. ⁶ altering ⁷ making it change ⁸ comes to conclusions on the basis of ⁹ detailed ¹⁰ typical



Remember that **phenomenon** is the singular and **phenomena** is the plural. The same applies to **criterion/criteria**. [a standard by which you judge, decide about or deal with something] See also Unit 31.

41.1 Complete the sentences in these two texts with words from the opposite page.

Scientists disagree as to whether cold fusion, the controlled power of the hydrogen bomb in the laboratory, is possible. In the past, some believed that e..... s..... under la..... c..... using palladium and platinum electrodes could in fact cause heavy hydrogen atoms to fuse into helium and release energy, as the sun does. In carefully controlled experiments, researchers believed they could ma..... the v..... arising from the complexity of the electrodes and other equipment used. In such co..... co....., they argued, cold fusion was possible. However, attempts to r..... some of the experiments which claimed to be successful failed, and many now believe that cold fusion is in fact theoretically impossible.

Some linguists believe that we can best d..... how language is processed by laboratory experiments. However, laboratory experiments are by definition ar..... and may not r..... what happens in the real world. Other linguists believe, therefore, that em..... o..... is better, and prefer to carry out f..... studies and c..... studies of individuals in na..... se..... In this way, i.....-d..... data can be c..... by observers without i..... with the process in any way, even though this may be a more t.....-c..... method. However, individual studies in real situations may not be r..... of the general p..... of second language learners. In short, both approaches have their advantages and disadvantages.

41.2 Use the words in the box to complete the diagrams. Add *alan* and anything else needed to complete the phrase.

check methodology pilot study procedure assemble technique experiment device piece



41.3 Now complete the sentences using phrases from 41.2.

- 1 It was a new of apparatus so we it first and then it before using it.
- 2 The team carried out a before conducting the main to see if the they were using was reliable.
- 3 The team needed to employ a different for measuring the pressure, so they used a new which they manufactured in their own laboratory.

41.4 Correct the eight spelling and other vocabulary mistakes in these sentences.

- 1 It was very difficult to make reliable interferences from the data as we had so little.
- 2 A correlational study is a good way of seeing if one phenomena is related to another in a system way.
- 3 The experiment neither proved nor deproved Jessop's theory.
- 4 We had to explain the unusual scores of five of the subjets in the sample, who all had totals well below the norm. It was possible there were unaccuracies in the data.
- 5 An exterior observer can often unintentionally erupt the behaviour of the subjects they are observing.