

5 Critical thinking

Critical thinking is a skill crucial to all students studying on academic courses. And while critical thinking is something that students on such courses approach with a degree of trepidation, it is a skill that can be fun to teach and to learn.

But what is critical thinking? In simple terms, critical thinking is the cognitive process involved in evaluating or analysing a statement, a sequence of statements, a paragraph, a whole chapter or a whole book. We also believe that it requires elements that are connected with the emotional side of language learning: critical thinking requires an element of curiosity and doubt. It involves breaking down a text and examining the various parts – almost like taking apart the engine of a car to see how it works. After that, the various parts are put back together again to see if they work together effectively. This then is the process that your students need to learn to use when writing and judging what they are reading.

Critical thinking is really a process that begins the moment your students start writing and reading, the moment they start making choices and decisions about the meanings they attach to what they read and the meanings they try to employ when they are writing. Now we have laid the foundations in Chapters 1–4, we can address this crucial aspect of teaching English for academic purposes.

An alien concept

Student: *You are brainwashing us.*

Student: *This is full of tricks to trap us!*

Analysing a reading text or presenting an analysis of a situation may be skills that are not just unfamiliar, but totally alien to your students (see Good practice 5.1). For some students up until now, critical thinking may have involved little more than giving answers to questions, without any attempt at going through the process of analysing and arriving at some kind of judgement or conclusion. Your students may need to be coaxed into approaching writing and reading in an analytical way, and be reminded again and again in mantra-like fashion that they have to learn to think independently and present ideas in their own way, and not just slavishly repeat ideas they have learnt by rote. While different cultural approaches to evaluating and analysing a situation may impede critical thinking in English, it is possible that the hindrance may be no more than a lack of linguistic competence. It is dangerous to stereotype students from different cultural backgrounds, but it is equally dangerous to assume that there are no differences. This is why it is important to find out what your students want and expect from your teaching. See Chapter 1 for details on student expectations, needs-analysis and cultural background.

Decide how alien it is to your students

If you want to develop your students' skills in critical thinking, you need to start from the very first day. Describing how to use critical thinking requires an understanding

of the information in the previous four chapters, as we shall see as we go through this chapter. If we use the example of an argument essay question we can see that from the moment your students look at the question, they are thinking. They are analysing the question and creating ideas.

At the next stage your students, it is hoped, will start to decide what their stance, position or angle is going to be. Some may start connecting their ideas before they take a particular position. As we have said above, it is not safe to assume that your students will have the necessary language or thinking skills to put forward an independent argument, rather than regurgitate someone else's ideas. So you may have to start with teaching a structured way of thinking and build upwards over a period of time.

At a more advanced level this may not be 'honest', as critical thinking requires independence of thought. But for lower levels a bottom-up approach may be the only option.

Methodology and critical thinking

Central to teaching your students to think independently and maturely in association with other students is the methodology you use, the amount of direction you give and the freedom you allow. Too much of either of the latter two ingredients will stifle your students' development. So it is important to be critical and judicious in the organization of your tasks. The first time you organize an activity, however, it might be better just to allow free talking about the topic within a time limit of, say, 10 minutes. You can then build on the task by adding different rules and parameters and varying the materials. You could, for example, encourage your students not to write or even make notes. You can tell them they can do so if they want at the end of the exercise.

It is important to resist the temptation to involve yourself with one or more groups, and to be strict with yourself so that you only make contact with students to encourage them to talk by asking questions. For example, if you were to give students a copy of the list of *Fact or opinion?* statements opposite, you could ask the following questions:

Is swimming an exercise? Is it a good exercise? What about walking? Is one better than the other? Does it depend on the person? Is swimming good for someone who can't walk?

There are many approaches to helping students work on their thinking skills. You may want to weave it through your writing, reading, speaking and listening activities without making any kind of formal separation between the skills and critical thinking. However, we think it helps to point out critical thinking clearly to your students, because it will help them to carry out a task more effectively when they see the purpose of what they are doing.

Recognizing facts and recognizing opinions

Critical thinking can be a separate entity within your lesson, or you may attach it to the four skills as you teach them. If you are teaching it separately or as an introduction to a writing or reading task, you can start with pictures and sentences. You can give your students a series of, say, three or four images along with seven or eight statements. Ask them first to match the statements to the pictures – two or three

per picture. The images can be pictures illustrating problems in the world around us (flooding, price rises) or concepts (beauty, age, work), which stimulate reaction. Students can decide whether the statements relating to the pictures are opinions or facts. For example, look at the picture below and the following two statements which relate to it.



The floods are causing considerable damage.

The floods are caused by human carelessness.

At a more advanced stage, your students can be given a list of statements like those below. Ask them to work in groups and decide whether each statement is a fact or opinion. Set a time limit of around 15 minutes and remind students of the finishing time every now and then.

Fact or opinion?

- 1 Swimming as an exercise is more beneficial than walking.
- 2 Iron is a metal.
- 3 It is better to spend money on alleviating poverty than on carrying out space research.
- 4 The planet is being threatened by the carelessness of the human race.
- 5 It is more important to improve educational standards at a younger level than at a secondary level.
- 6 University education is a luxury, not a right.
- 7 There is a clear link between violent video games and crime.
- 8 The news in newspapers is impartial.
- 9 Change is now a part of everyday life.
- 10 Change for change's sake is wasteful.

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Time should be allowed for discussion of the answers. If the discussion looks as though it can continue on its own throughout the class, allow a few extra minutes. However, do not let it run on endlessly as the exercise will then lose its value. An important aspect of this exercise is to show that what may appear to be obviously true for some people is not necessarily the case for others. In some parts of the world – Europe for example – statement 9 above may be true. In other, less industrialized technological areas, it may not.

Long ago, it was dangerous to contradict the idea that the Earth was flat and that the Sun and planets moved around the Earth. And so it is in writing and reading. What each of us thinks is true may only be true according to the limitations of our knowledge and experience. Other people may come along and disagree because they have more or less information and more or less experience. Our task in writing and reading is therefore to convince or be convinced about a piece of information and/or of an argument.

To add variety to the exercise above, you could use:

- a list of quotations from famous people;
- statements that students have written in their assignments;
- statements that your students have read recently;
- news items;
- discoveries/inventions that are contested by different countries, eg, the first hamburger, the first printed book, the first computer, etc.

This latter exercise can lead to a discussion about the perception of events in the world being dependent on where you are in the world, and which perspective you are looking at the world from. For a more advanced exercise of this type, see Activity 5.1.

Using verbal reasoning to examine a text

As an introduction to examining a text, you can start with a factual text or a simple narrative. You can teach your students simple questions to help analyse the detail in a text and hence develop their basic reasoning skills. Look at the untitled text below.

They hurried away without much attention to where they were going, only conscious of the fact that they had to get back to their vehicle. They looked up at the empty factories and warehouses as they ran along the empty cobbled streets. Some buildings were little more than burnt-out shells, and they were dark and gloomy in the fading light. There was a chill in the air. They finally reached the wasteland at the edge of town where they had parked. It was only as they were climbing into the car that they both realized their trousers were splattered with red spots. But it was too late to change them now.

To help students think about the text, the text can be manipulated in different ways. You can approach the text from the standard factual comprehension angle by asking questions like: *What were they trying to get to? What types of buildings are on the cobbled streets? Were there people on the streets?* Your students can then in groups create short questions to examine the text. You can ask them to write them down or just create them orally.

A slightly different approach is to ask them to look at the text from the perspective of what information they do not know or what they would like to know. This will help clarify what your students read into a text and will help them think more about the reader when they are writing.

Questions you can use to elicit information about the text include:

Do we know who 'they' are?

Where are they going?

Do we know what kind of vehicle it is?

Are they hurrying or are they walking at a leisurely pace?

What are they doing?

How are they moving along?

You can also ask your students to think about what they would like to know about the text. For example:

Who are the people?

How many people are there?

Why are they hurrying?

Are they male or female?

Just from these questions, it is possible to see how much information is not available and how easy it is to gloss over it without really thinking. After you have focused on encouraging your students to think in this way, you can give them another short descriptive text and ask them to generate a selection of questions. You can also ask them to work in groups and add information to the text to explain the context. The best version can be chosen by the class.

Critical thinking and reading

Looking at a reading passage critically so that your students can evaluate and analyse the text requires an understanding of how a text is organized in English (see Chapters 3 and 4 for more on this). But your students also need an armoury of skills and techniques that they can employ to evaluate what they are reading and to judge the arguments, rather than just looking at the words or the meaning. Your students need to learn to form judgements about texts and to test texts against certain criteria or standards. We saw in the previous section how to examine a text using factual questions. If your students are reading a text which contains an argument, a report or an explanation, a similar approach can be used. The class can be divided into groups and given a fairly basic sample or model text containing a reasoned argument.

The students can either be asked to discuss the argument – whether it is good or not, and why – or they can be given a list of questions to evaluate the text. You could even ask them to compile a list of questions themselves. You could use a checklist of questions, such as:

Is there a reason?

Is there an example?

Is there a result?

Is there a cause?

Is there an effect?

Is there a thesis statement?

Is there a conclusion?

You can use a text that contains all the items on the list, one that contains only some of the items or one that has extra items that your students have to identify for themselves. The latter two variations can be introduced after your students are familiar with the first variation. You can ask students to identify any signpost words or phrases in the text like *for example* or *because*, which helped them answer the questions in the list above. Students can then write the signpost words and phrases against the questions. Next, the questions can be numbered in the same order that the items appear in the text. See Activity 5.3 for more practice in this skill.

Evaluating and analysing

Once your students have learnt how to identify the different parts of the paragraph, you can then move on to making judgements about the parts of the text identified. This may be a process your students are not familiar with and it may require some basic spoon-feeding.

Using one of the texts mentioned in the previous section, your students can be asked to judge the quality of the various parts of the text. You could give students a list of adjectives to apply to the text, or a list of questions to examine each part of the text. Some evaluation questions you could use include:

Is the overall argument clear?

Is the purpose of the text evident?

Is the example relevant/pertinent?

Is the reason/Are the reasons given compelling?

Is the conclusion valid?

Is the argument well organized?

Is the language appropriate?

As a variation, you can:

- include texts with a few elements which are fairly good, but which could be improved on;