

English in Mind Second edition

Level 5 Unit 14

Lesson Plan

THE  **INDEPENDENT****Scientists able to read people's minds****AIMS**

- to read extensively and study a text related to the Unit theme
- to practise reading for gist and for detailed comprehension
- to understand new words in context
- to increase awareness of compound nouns and the formation of adjectives ending in *-al*
- to understand and practise the use of future time expressions
- to promote discussion
- (further work) to promote writing skills

Total time (approx): 1 hour 15 minutes

(Note: some exercises can be set for homework)

Key:

- 1 Correct. This is the original subtitle. It describes the limited claim made in the article.
- 2 Incorrect. It is a wider claim.
- 3 Incorrect. The scientists quoted believe that a thought machine may well be invented one day.

Time: 8–10 minutes

Reading comprehension (2): reading for detail

- 3 For this task, students need to look more closely at the text. They should choose from the words in the box to complete the paragraph, which summarises the main points of the article. Note that some extra words are given as distractors. Predicting what kind of word is needed for each gap (e.g. noun, adjective) will help them with their choices. Put them in pairs to find the appropriate sections in the text.

Key: 2 hippocampus 3 memories 4 future 5 taxi
6 Alzheimer's 7 mind-reading 8 ethical

Time: 8–10 minutes

Lead-in

- 1 To introduce the topic of mind-reading, ask students to close their eyes and imagine themselves somewhere beautiful. They should then turn to their partner and try to guess what they were imagining. Of course, we can never be sure what secret thoughts are going on in other people's heads. Your students may raise the topic of telepathy, or point to the external signals which allow us to guess another's thoughts. Allow them to express their ideas freely without comment, but do not encourage lengthy discussion. Direct them to the final question in this section, which concerns mind-reading machines.

Time: 5–8 minutes

Reading comprehension (1): reading for gist

- 2 Distribute the article and ask students to read it through quickly to get an overall view of what the text is about. Three possible subtitles are given. Students should choose which one most closely represents the claims of the scientists reported in the article. Ask them to compare answers with their partner before checking in class.

Vocabulary (1): words in context

- 4 This exercise helps students with some of the less familiar vocabulary in the article. It is important that they find the words in the text before matching them to their definitions, using the context to help them infer meaning. They can work individually on this exercise before checking their answers in pairs.

Key: 2e 3a 4b 5h 6c 7g 8d

Time: 10 minutes

Vocabulary (2): word formation

- 5 The article contains a number of compound nouns (i.e. nouns formed by combining two or more words), and this exercise highlights the different ways in which they can be formed (as one word, as separate words or with a hyphen) and their stress. There are no absolute spelling rules for these compounds, with dictionaries varying as to how they are presented.

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Scientists able to read people's minds

The stress generally falls on the first word, especially if it is helping to define the second (e.g. 'taxi driver', 'brain scanner'). 'Science fiction' is the exception here: it is not fiction that is specifically about science, but a literary genre of its own. The stress therefore falls equally on each word. Students should try this task from memory, before finding the answers in the text.

Key: 1 brain scanner 2 thought machine 3 nerve cells
4 science fiction 5 taxi driver 6 mind reading/
mindreading (both used in text) 7 neuroscience 8 brain
activity. NB other combinations are possible, e.g. brain
cells, brain science, thought reading

Time: 7–8 minutes

- 6 This exercise highlights the formation of adjectives ending in *-al*. All are to be found in the article, but encourage your students to work from memory before checking their answers in the text. Paragraph numbers are given for ease of location.

Key: 2 neural 3 ethical 4 functional 5 hippocampal
6 spatial 7 neurological 8 social

Most of these adjectives are connected with science in this text, but some may not be so in different contexts (*ethical, functional, spatial, social*). Further examples of scientific adjectives ending in *-al* are: *chemical, biological, psychological*. Point out that the nouns from which these adjectives are derived have many different endings. Not *all* scientific adjectives end in *-al* (e.g. *scientific, forensic*).

Time: 5–6 minutes

Grammar: time phrases

- 7 Some useful phrases relating to future points in time are highlighted here. None of them has a precise meaning, so their placing on the timeline will be approximate. Whilst (1) and (5) obviously come closer to the present moment, (2), (3) and (4) all indicate a distant future. Do not get into arguments with your students about where exactly to place them. The order given in the Key is a suggestion only. It very much depends on context, e.g. getting married may seem 'a distant prospect' to a 13-year-old; but so also

will end-of-year examinations in June, when you are still only in September.

Key: 5 1 4 3 2

NOW ---/-----/-----/-----/-----/----->

Note: 'a step closer' implies that you have come a little nearer to an ultimate goal, with more steps to come before you reach it.

Time: 5–6 minutes

- 8 In this exercise students are given the opportunity to use the time phrases from Exercise 7 in a personal way to talk about their own future lives. Write examples on the board, illustrating the correct grammatical structures to be used in each case. The statements need not be related to each other. Give students a little time to complete the sentences for themselves before putting them in pairs or small groups to share them with each other. Encourage them to develop and discuss their statements. The Key provides suggestions.

Key:

- 1 One day, I hope I will have a house of my own / there will be no more wars.
- 2 Old age / Learning to drive is a distant prospect for me.
- 3 Getting a degree will bring me a step closer to realising my dreams.
- 4 I'm still a long way from becoming a concert pianist.
- 5 In the near future I plan to get a part-time job.

Time: 8–10 minutes

Discussion

- 9 This task encourages students to consider the wider implications of future scientific developments and to express their ideas orally. The questions prompt them to think both positively and negatively about the possible uses of mind-reading machines, and to consider whether the advance of science can be halted. Put them into pairs or small groups, suggesting that they write brief notes on their ideas. Open up the discussion for a class debate.

Time: 10–12 minutes

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10 The following are suggestions for further work based on the topic of the article.

- a) **Writing: Letter to the editor.** Ideas formulated in response to the questions in Exercise 9 could be used in the form of a response to the article, for publication in a later issue of the newspaper. Show students examples of 'letters to the Editor' in a quality newspaper, pointing out the formal style and need for brevity. The letter should outline the possible 'ethical' problems mentioned, but not specified, by Professor Maguire, concluding whether such machines should be eventually permitted or banned.

- b) **Film/TV script.** Get students to work in small groups to script a short scene (2–3 pages) for a science fiction TV series or film, featuring a mindreading machine. They should work together to decide on characters, setting and a storyline. It can be from the beginning, middle or end of a film or TV episode. The script should be in the form of a scene for a play, with parts written out and instructions for set, costumes, background music, etc. Get groups to rehearse and act out their scripts when they are ready.

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