

## **IELTS READING 14**

### **SECTION 1**

#### **DESTINATIONS FOR INTERNATIONAL ENGLISH STUDENTS**

##### **Paragraph (i)**

At any given time, more than a million international students around the world are engaged in the study of the English language in a predominantly English-speaking country. The five most popular destinations, in order of popularity, are the U. S., Britain, Australia, New Zealand, and Canada. The reasons for choosing to study English abroad differ with each individual, as do the reasons for the choice of destination.

##### **Paragraph (ii)**

Numerous studies conducted in Britain and the United States show that the country of choice depends to a large extent on economic factors. While this should not provoke much surprise, careful analysis of the data suggests that students and their parents are most influenced by the preconceptions they have of the countries considered for study abroad, which, in turn, influence the amount they or their parents are prepared to outlay for the experience. The strength of international business connections between countries also gives a good indication of where students will seek tuition. In the main, students tend to follow the traditional pattern of study for their national group.

##### **Paragraph (iii)**

The United States attracts the most diverse array of nationalities to its English language classrooms - this heterogeneity being largely due to its immense pulling power as the world's foremost economy and the resulting extensive focus on U.S. culture. Furthermore, throughout the non-European world, in Asia and North and South America especially, the course books used to teach English in most elementary and high schools introduce students to American English and the American accent from a very early age. Canada also benefits from worldwide North American exposure, but has the most homogenous group of students - most with French as their first language. Before furthering their English skills, students in Europe study from predominantly British English material; most Europeans, naturally, opt for neighbouring Britain, but many Asian, Middle-Eastern, and African students decide upon the same route too.

##### **Paragraph (iv)**

Australia and New Zealand are often overlooked, but hundreds of thousands of international students have discovered the delights of studying in the Southern Hemisphere.

The majority are Asian for reasons that are not difficult to comprehend: the proximity of the two countries to Asia, (Jakarta, the capital of Australia's closest Asian neighbor, Indonesia, is only 5506 kilometers from Sydney), the comparatively inexpensive cost of living and tuition, and, perhaps of most importance to many Asian students whose English study is a prelude to tertiary study, the growing awareness that courses at antipodean universities and colleges are of an exceptionally high standard. In addition, revised entry procedures for overseas students have made it possible for an increasing number to attend classes to improve their English for alternative reasons.

**Paragraph (v)**

Australia and New Zealand have roughly the same mix of students in their language classrooms, but not all students of English who choose these countries are from Asia. The emerging global consciousness of the late twentieth century has meant that students from as far as Sweden and Brazil are choosing to combine a taste for exotic travel with the study of English 'down under' and in 'the land of the long white cloud'. But even the Asian economic downturn in the 1990s has not significantly altered the demographic composition of the majority of English language classrooms within the region.

**Paragraph (vi)**

Nor have the economic problems in Asia caused appreciable drops in full-time college and university attendances by Asian students in these two countries. This is partly because there has always been a greater demand for enrolment at Australian and New Zealand tertiary institutions than places available to overseas students. In addition, the economic squeeze seems to have had a compensatory effect. It has clearly caused a reduction in the number of students from affected countries who are financially able to study overseas. However, there has been a slight but noticeable shift towards Australia and New Zealand by less wealthy Asian students who might otherwise have chosen the United States for English study.

**Paragraph (vii)**

The U.S. and Britain will always be the first choice of most students wishing to study the English language abroad, and it is too early to tell whether this trend will continue. However, economic considerations undoubtedly wield great influence upon Asian and non-Asian students alike. If student expectations can be met in less traditional study destinations, and as the world continues to shrink, future international students of English will be advantaged because the choice of viable study destinations will be wider.

### Questions 1-3

Complete the missing information in the table below by referring to Reading Passage 1. Write your answers in boxes 1 - 4 on your Answer Sheet. The first one has been done for you as an example.

	U.S.	Britain	Australia	New Zealand	Canada
<b>order of popularity</b>	1 <sup>st</sup>	<i>Ex: 2<sup>nd</sup></i>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
	American	1.....	2.....	not given	not given
<b>type of English in course books used in this country</b>	1	2	3.....	Equal 3	5
<b>student heterogeneity</b> (1 = most heterogenous 5 = least heterogenous)					

### Questions 4-9

Choose the most suitable heading from the list of headings below for the seven paragraphs of Reading Passage 1. Write your answers in boxes 5 - 10 on your Answer Sheet.

#### List of Heading

- A. Heterogeneity in the language classroom
- B. Enrolment demand in Australia & New Zealand.
- C. Reasons for the choice of destination
- D. The attractions of studying in the antipodes
- E. Conclusion
- F. Additional student sources
- G. Student destinations

4. Paragraph (i) .....

5. Paragraph (ii) .....

6. Paragraph (iii).....

7. Paragraph (iv).....

8. Paragraph (v).....

9. Paragraph (vi).....

### **Questions 10-15**

Refer to Reading Passage 1 "Destinations for International English Students", and look at the statements below.

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10. Study destination choices are mostly influenced by proximity to home.

11. Students who wish to study business will probably study English overseas.

12. Students of the same nationality usually make similar study choices.

13. English language classrooms in the U.S. have the widest range of student nationalities.

14. Standards at Australian and New Zealand tertiary institutions are improving.

15. Despite the 1990s Asian economic crisis, Asian students still dominate the English language classrooms of Australia and New Zealand.

## SECTION2

### STICKING POWER

*Want to walk on the ceiling?  
All it takes is a bit of fancy footwork*

**A** If Keilar Autumn, an expert in Biomechanik at Clark College in Portland, Oregon, has his way, the first footprints on Mars won't be human. They'll belong to a gecko. Gecko toes have legendary sticking power - and the Clark College scientist would like to see the next generation of Martian robots walking about on gecko-style feet. A gecko can whiz up the smoothest wall and hang from the ceiling by one foot, with no fear of falling.

**B** Autumn is one of a long line of researchers who have puzzled over the gecko's gravity-defying footwork. Earlier this year, he and his colleagues discovered that the gecko's toes don't just stick, they bond to the surface beneath them. Engineers are already trying to copy the gecko's technique - but reptilian feet are not the only ones they are interested in.

**C** Some of the most persistent 'hanging' creatures are insects. They can defy not just gravity, but gusts of wind, raindrops and a predator's attempt to prize them loose. Recent discoveries about how they achieve this could lead to the development of quick-release adhesives and miniature grippers, ideal for manipulating microscopic components or holding tiny bits of tissue together during surgery. 'There are lots of ways to make two surfaces stick together, but there are very few which provide precise and reversible attachment,' says Stas Gorb, a biologist in Tübingen, Germany, working on the problem.

**D** Geckos and insects have both perfected ways of doing this, and engineers and scientists would dearly love to know how. Friction certainly plays a part in assisting horizontal movement, but when the animal is running up a slope, climbing vertically or travelling upside down, it needs a more powerful adhesive. Just what that adhesive is has been hotly debated for years. Some people suggested that insects had micro-suckers. Some reckoned they relied on electrostatic forces. Others thought that intermolecular forces between pad and leaf might provide a firm foothold.

**E** Most of the evidence suggests that insects rely on 'wet adhesion', hanging on with the help of a thin film of fluid on the bottom of the pad. Insects often leave tiny trails of oily footprints. Some clearly secrete a fluid onto the 'soles' of their feet. And they tend to lose their footing when they have their feet cleaned or dried.

**F** This year, Walter Federle, an entomologist at the University of Würzburg, showed experimentally that an insect's sticking power depends on a thin film of liquid under its feet. He placed an ant on a polished turntable inside the rotor of a centrifuge, and switched it on. At slow speeds, the ant carried on walking unperturbed. But as the scientist slowly

increased the speed, the pulling forces grew stronger and the ant stopped dead, legs spread out and all six feet planted firmly on the ground. At higher speeds still, the ant's feet began to slide. 'This can only be explained by the presence of a liquid,' says Federle. 'If the ant relied on some form of dry adhesion, its feet would pop abruptly off the surface once the pull got too strong.'

**G** But the liquid isn't the whole story. What engineers really find exciting about insect feet is the way they make almost perfect contact with the surface beneath. 'Sticking to a perfectly smooth surface is no big deal,' says Gorb. But in nature, even the smoothest-looking surfaces have microscopic lumps and bumps. For a footpad to make good contact, it must follow the contours of the landscape beneath it. Flies, beetles and earwigs have solved the problem with hairy footpads, with hairs that bend like the bristles of a toothbrush to accommodate the troughs below.

**H** Gorb has tested dozens of species with this sort of pad to see which had the best stick. Flies resist a pull of three or four times their body weight - perfectly adequate for crossing the ceiling. But beetles can do better and the champion is a small, blue beetle with oversized yellow feet, found in the south-eastern parts of the US.

**I** Tom Eisner, a chemical ecologist at Cornell University in New York, has been fascinated by this beetle for years. Almost 30 years ago, he suggested that the beetle clung tight to avoid being picked off by predators - ants in particular. When Eisner measured the beetle's sticking power earlier this year, he found that it can withstand pulling forces of around 80 times its own weight for about two minutes and an astonishing 200 times its own weight for shorter periods. 'The ants give up because the beetle holds on longer than they can be bothered to attack it,' he says.

**J** Whatever liquid insects rely on, the gecko seems able to manage without it. No one knows quite why the gecko needs so much sticking power. 'It seems overbuilt for the job,' says Autumn. But whatever the gecko's needs are, its skills are in demand by humans. Autumn and his colleagues in Oregon have already helped to create a robot that walks like a gecko. Mecho-Gecko, a robot built by iRobot of Massachusetts, walks like a lizard - rolling its toes down and peeling them up again. At the moment, though, it has to make do with balls of glue to give it stick. The next step is to try to reproduce the hairs on a gecko's toes and create a robot with the full set of gecko skills. Then we could build robots with feet that stick without glue, clean themselves and work just as well underwater as in the vacuum of space, or crawling over the dusty landscape of Mars.

### Questions 14-18

You should spend about 20 minutes on questions 16-20, which are based on Reading Passage 2. Match each statement with the correct scientist A, B, C or D.

Write the correct letter A, B, C or D in boxes 14-18 on your answer sheet.

#### List of Scientists

- A Kellar Autumn
- B Stas Gorb
- C Walter Federte
- D Tom Eisher

16 Some insects use their ability to stick to surfaces as a way of defending themselves.

17 What makes sticky insect feet special is the fact that they can also detach themselves easily from a surface.

18 Gecko feet seem to be stickier than they need to be.

19 A robot with gecko-style feet would be ideal for exploring other planets.

20 Evidence shows that in order to stick, insect feet have to be wet.

### Questions 21-24

Reading Passage 2 has ten paragraphs A-J. Which paragraph contains the following information? Write the correct letter A-J in boxes 19-22 on your answer sheet.

21 some of the practical things a gecko-style adhesive could be used for

22 a description of a test involving an insect in motion

23 three different theories scientists have had about how insect feet stick

24 examples of remarkable gecko movements

### Questions 25-28

Complete each sentence with the correct ending A-G below. Write the correct letters, A-G in boxes 23-26 on your answer sheet.

- A stick to surfaces in and out of water.
- B curl up and down.
- C are washed and dried.
- D resist a pull of three times their body weight.
- E start to slip across the surface.
- F leave yellow footprints.
- G have hairy footpads.

25 Insect feet lose their sticking power when they

26 If you put ants on a rapidly rotating object, their feet

27 Beetles can stick to uneven surfaces because they

28 The toes on robots like Mecho-Gecko

## SECTION 3

### MEASURING ORGANIZATIONAL PERFORMANCE

There is clear-cut evidence that, for a period of at least one year, supervision, which increases the direct pressure for productivity can achieve significant increases in production. However, such short-term increases are obtained only at a substantial and serious cost to the organisation.

To what extent can a manager make an impressive earnings record over a short period of one to three years by exploiting the company's investment in the human organisation in his plant or division? To what extent will the quality of his organisation suffer if he does so? The following is a description of an important study conducted by the Institute for Social Research designed to answer these questions.

The study covered 500 clerical employees in four parallel divisions. Each division was organised in exactly the same way, used the same technology, did exactly the same kind of work, and had employees of comparable aptitude.



Productivity in all four of the divisions depended on the number of clerks involved. The work entailed the processing of accounts and generating of invoices. Although the volume of work was considerable, the nature of the business was such that it could only be processed as it came along. Consequently, the only way in which productivity could be increased was to change the size of the workgroup.

The four divisions were assigned to two experimental programmes on a random basis. Each programme was assigned at random a division that had been historically high in productivity and a division that had been below average in productivity. No attempt was made to place a division in the programme that would best fit its habitual methods of supervision used by the manager, assistant managers, supervisors and assistant supervisors.

The experiment at the clerical level lasted for one year. Beforehand, several months were devoted to planning, and there was also a training period of approximately six months. Productivity was measured continuously and computed weekly throughout the year. The attitudes of employees and supervisory staff towards their work were measured just before and after the period.

Turning now to the heart of the study, in two divisions an attempt was made to change the supervision so that the decision levels were pushed down and detailed supervision of the workers reduced. More general supervision of the clerks and their supervisors was introduced. In addition, the managers, assistant managers, supervisors and assistant supervisors of these two divisions were trained in group methods of leadership, which they endeavoured to use as much as their skill would permit during the experimental year. For easy reference, the experimental changes in these two divisions will be labelled the 'participative programme'!

## **Result of the Experiment**

In the other two divisions, by contrast, the programme called for modifying the supervision so as to increase the closeness of supervision and move the decision levels upwards. This will be labelled the 'hierarchically controlled programme'. These changes were accomplished by a further extension of the scientific management approach. For example, one of the major changes made was to have the jobs timed and to have standard times computed. This showed that these divisions were overstaffed by about 30%. The general manager then ordered the managers of these two divisions to cut staff by 25%. This was done by transfers without replacing the persons who left; no one was to be dismissed.

## **Changes in Productivity**

Figure 1 shows the changes in salary costs per unit of work, which reflect the change in productivity that occurred in the divisions. As will be observed, the hierarchically controlled programmes increased productivity by about 25%. This was a result of the direct orders from the general manager to reduce staff by that amount. Direct pressures produced a substantial increase in production.

A significant increase in productivity of 20% was also achieved in the participative programme, but this was not as great an increase as in the hierarchically controlled programme. To bring about this improvement, the clerks themselves participated in the decision to reduce the size of the work group. (They were aware of course that productivity increases were sought by management in conducting these experiments.) Obviously, deciding to reduce the size of a work group by eliminating some of its members is probably one of the most difficult decisions for a work group to make. Yet the clerks made it. In fact, one division in the participative programme increased its productivity by about the same amount as each of the two divisions in the hierarchically controlled programme. The other participative division, which historically had been the poorest of all the divisions, did not do so well and increased productivity by only 15%.

## **Changes in Attitude**

Although both programmes had similar effects on productivity, they had significantly different results in other respects. The productivity increases in the hierarchically controlled programme were accompanied by shifts in an adverse direction in such factors as loyalty, attitudes, interest, and involvement in the work. But just the opposite was true in the participative programme.

For example, Figure 2 shows that when more general supervision and increased participation were provided, the employees' feeling of responsibility to see that the work got done increased. Again, when the supervisor was away, they kept on working. In the hierarchically controlled programme, however, the feeling of responsibility decreased, and when the supervisor was absent, work tended to stop.

As Figure 3 shows, the employees in the participative programme at the end of the year felt that their manager and assistant manager were 'closer to them' than at the beginning of the year. The opposite was true in the hierarchical programme. Moreover, as Figure 4 shows, employees in the participative programme felt that their supervisors were more likely to 'pull' for them, or for the company and them, and not be solely interested in the company, while in the hierarchically controlled programme, the opposite trend occurred.

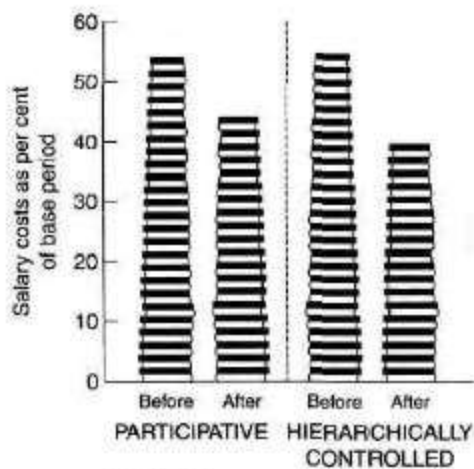


FIGURE 1

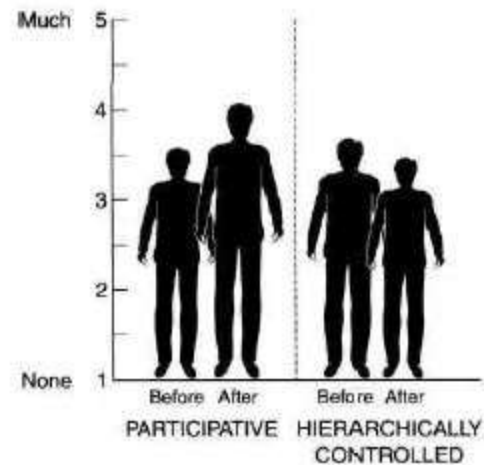


FIGURE 2

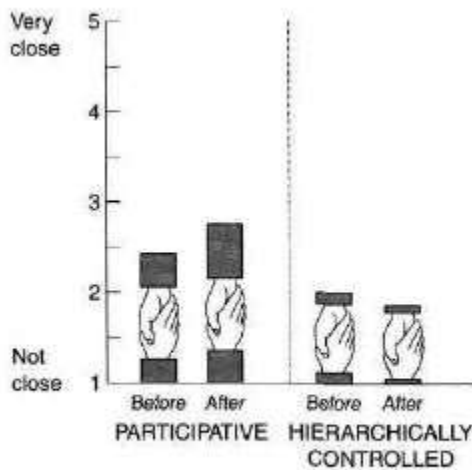


FIGURE 3

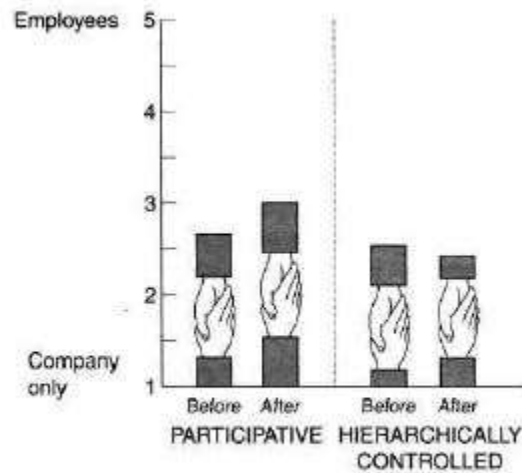


FIGURE 4

## Questions 29-30

Choose the appropriate letters A-D

29. The experiment was designed to ...

- A. establish whether increased productivity should be sought at any cost.
- B. show that four divisions could use the same technology.
- C. perfect a system for processing accounts.
- D. exploit the human organisation of a company in order to increase profits.

30. Before the experiment ...

- A. the four divisions were carefully selected to suit a specific programme.
- B. each division was told to reduce its level of productivity.
- C. the staff involved spent a number of months preparing for the study.
- D. the employees were questioned about their feelings towards the study.

### Questions 31-36

Complete the summary below. Choose ONE word from Reading Passage 24 for each answer. Write your answers in boxes 31-36 on your answer sheet.

This experiment involved an organisation comprising four divisions, which were divided into two programmes: the hierarchically controlled programme and the participative programme. For a period of one year a different method of 31 .....was used in each programme. Throughout this time 32..... was calculated on a weekly basis. During the course of the experiment, the following changes were made in an attempt to improve performance.

In the participative programme:

- supervision of all workers was 33.....
- supervisory staff were given training in 34.....

In the hierarchically controlled programme:

- supervision of all workers was increased.
- work groups were found to be 35..... by 30%.
- the workforce was 36..... by 25%.

### Questions 37- 40

Look at Figures 1, 2, 3 and 4 in Reading Passage 3. Choose the most appropriate label, A—I, for each Figure from the box below. Write your answers in boxes 37- 40 on your answer sheet.

- A. Employees' interest in the company
- B. Cost increases for the company
- C. Changes in productivity
- D. Employees' feelings of responsibility towards completion of work
- E. Changes in productivity when supervisor was absent
- F. Employees' opinion as to extent of personal support from management
- G. Employees feel closer to their supervisors
- H. Employees' feelings towards increased supervision
- I. Supervisors' opinion as to closeness of work group

37. Fig 1.....

38. Fig 2.....

39. Fig 3.....

40. Fig 4.....