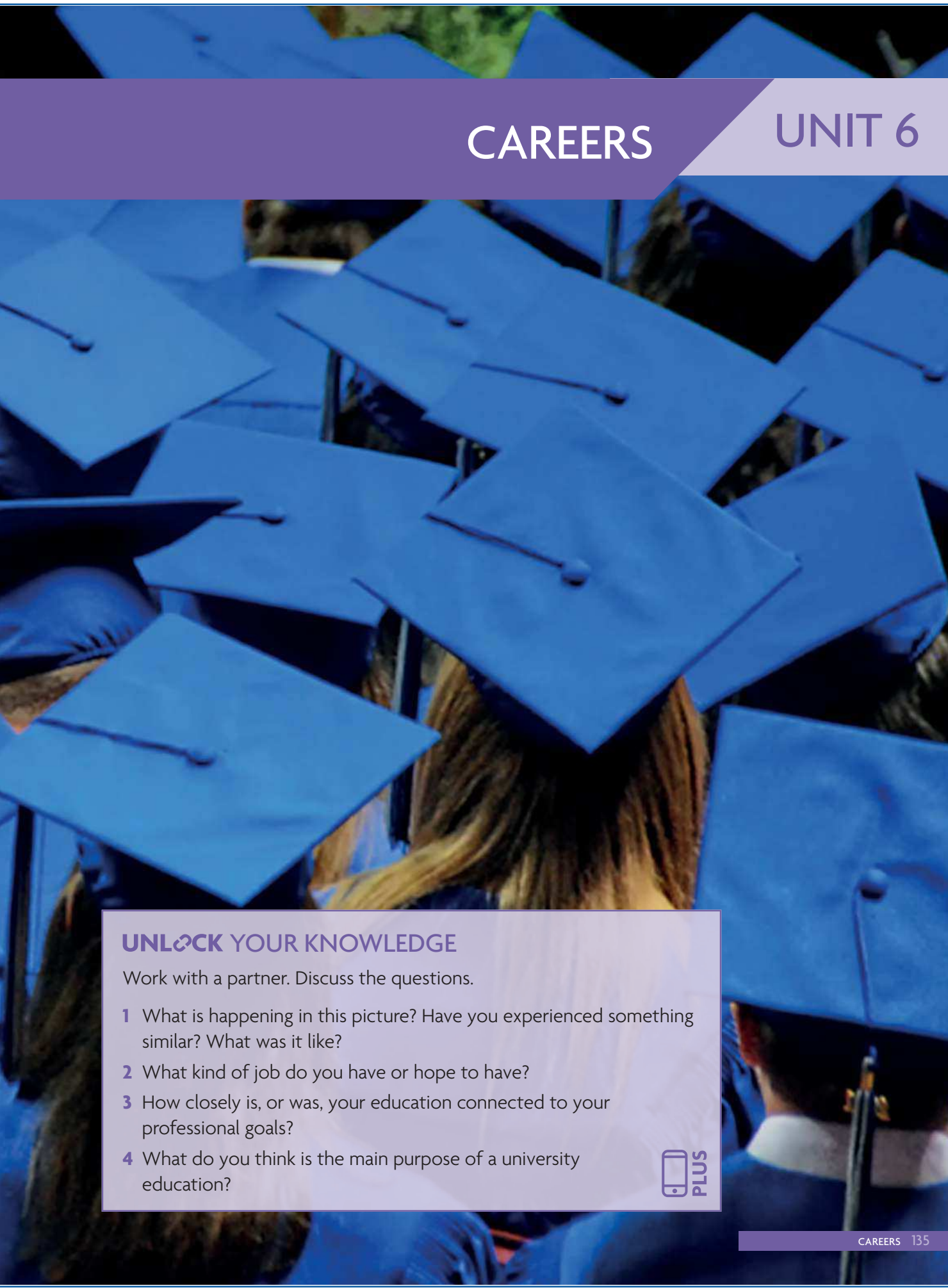
UNIT 6 CAREERS



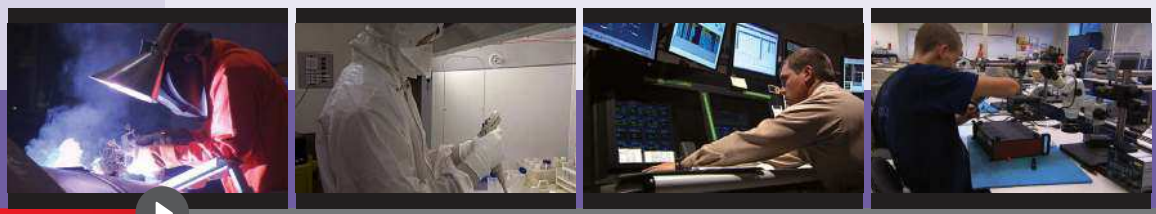
UNLOCK YOUR KNOWLEDGE

Work with a partner. Discuss the questions.

1. What is happening in this picture? Have you experienced something similar? What was it like?
2. What kind of job do you have or hope to have?
3. How closely is, or was, your education connected to your professional goals?
4. What do you think is the main purpose of a university education?

PLUS

WATCH AND LISTEN



PREPARING TO WATCH

ACTIVATING YOUR KNOWLEDGE

1 Work with a partner. Discuss the questions.

1 Are there vocational colleges / secondary schools for teenagers in your country? How might vocational training benefit school-leavers?
2 What do most young people do after completing secondary school?
3 What job opportunities exist for young people after secondary school?
4 What industries do you think are in need of more workers?

PREDICTING CONTENT USING VISUALS

2 You are going to watch a video about vocational training. Look at the photos and complete the table. Discuss your table with a partner.

	photo 1	photo 2	photo 3	photo 4
1 What job does this person have?				
2 What kind of training is needed for this job?				

GLOSSARY

not dig something (v phr, informal US) not enjoy something

second shift (n) working hours from approximately 4pm to midnight

welder (n) a person whose job is joining metal parts together

hydrogen (n) a chemical element that is the lightest gas, has no colour, taste, or smell, and combines with oxygen to form water

instrument technician (n) someone who works repairing, maintaining and adjusting industrial controlling and measuring systems

vo-tech education (US n phr) education in which students get vocational training (training for a specific career) and/or technical training (training using the tools, machinery, manual techniques, etc. involved in a particular field)

federal (adj) of, or connected with, the central government of some states, including in the USA

career path (n) the way that you progress in your work, either in one job or in a series of jobs

WHILE WATCHING

UNDERSTANDING MAIN IDEAS

3 Watch the video. Circle the ideas you hear.

1 Nick had more than one job offer when he graduated from a career and technical high school.
2 The need for technical workers is increasing.
3 Air Products manufactures high tech equipment.
4 John McGlade has to train the skilled workers he needs himself.
5 Government support for vocational education is decreasing.
6 Not many young people are interested in vocational education.

UNDERSTANDING DETAIL

4 Watch the video again. Write details for each main idea.

1 Air Products has 7,500 workers, and not all are skilled.

_____

2 John McGlade's company often has positions available.

_____

3 Career and technical education has been cut, and more cuts may be on the way.

_____

4 Vocational schools train students to work in technical careers.

_____

MAKING INFERENCES

5 Work with a partner. Discuss the questions.

1 Do you think Nick likes his job? Why / Why not?
2 Why do you think John McGlade is worried?
3 Why do you think more skilled workers will be needed in the future?
4 What do you think are some other jobs that students can train for at a career and technical high school?

DISCUSSION

6 Work with a partner. Discuss the questions.

1 Do you think entering into a career and technical high school is a good idea? Why / Why not?
2 Would you have been interested in attending a career and technical high school? Why / Why not?
3 What are the advantages of young people entering the workforce shortly after secondary school? Are there any disadvantages?

READING

READING 1

PREPARING TO READ

SKILLS

Interpreting graphical information

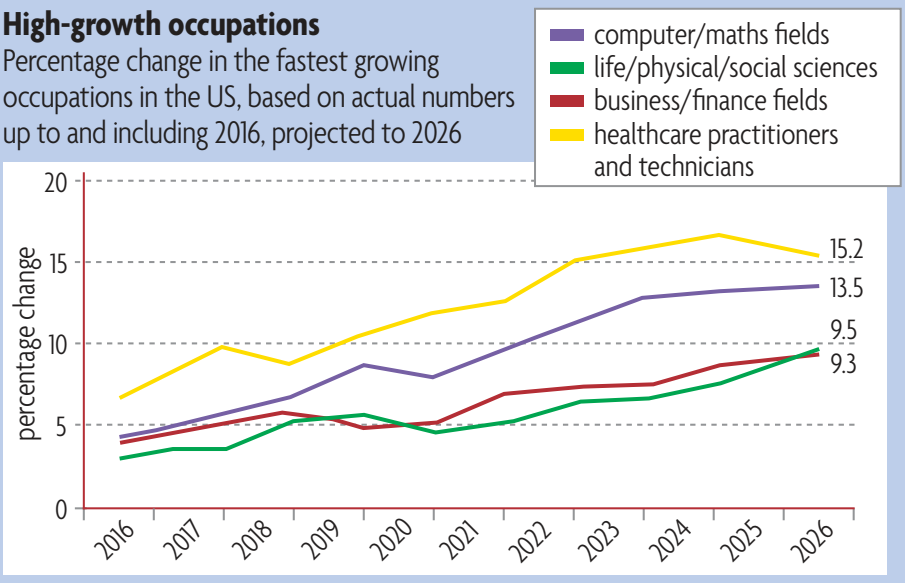
Academic texts often include tables, graphs or other diagrams to support and extend the content of the text. In a good academic text the graphical information is always discussed and interpreted in the body of the text – graphs and diagrams are not just put in a text and not discussed.

As a first step to understanding information presented in graphical form, read the title, headings and the labels on the axes on any graphs. This will provide some context for the information presented there. If the axes of a graph are not labelled, try to work out what the labels would be.

PREDICTING CONTENT USING VISUALS

1 You are going to read an article about the demand for workers with appropriate skills. Work with a partner. Look at the graph and discuss the questions below.

High-growth occupations
Percentage change in the fastest growing occupations in the US, based on actual numbers up to and including 2016, projected to 2026



Source: US Bureau of Labor Statistics

1 What kinds of jobs does each category include? Name some.
2 What sorts of skills and education are required for the jobs in these fields?
3 Why do you think these occupational areas are predicted to be the fastest growing in the near future?
4 What implications might this prediction have for school curriculum development?

PREVIEWING

2 Now look at Figures 1 and 2 in the article on pages 140–141 and answer the questions about each graph.

1 What does the horizontal axis (the x-axis) measure?
2 What does the vertical axis (the y-axis) measure?
3 What information does the whole graph express?

3 Based on the information in the graphs in the article, answer the questions.

1 Look at Figure 1. Why do you think companies are struggling to recruit employees?
2 What problem does Figure 2 illustrate?
3 How does the information in Figure 2 explain the problems that the employers in Figure 1 are experiencing?

UNDERSTANDING KEY VOCABULARY

4 Read the definitions. Use the correct forms of the words in bold to complete the sentences below.

assertive (adj) forceful; bold and confident
comprise (v) to have things or people as parts or members; to consist of
expertise (n) a high level of knowledge or skill
labour (n) workers, especially people who do practical work with their hands
mismatch (n) things that do not work well together
persistent (adj) (of a problem) lasting for a long time, difficult to resolve
pose (v) to cause
prospective (adj) wanted or expected to do a particular thing in the future

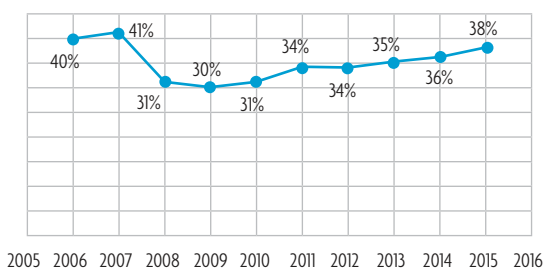
1 Professors at this technical institute are known for their _____ in robotics and high-tech electronics.
2 This situation _____ a real problem for our company because we can't find skilled applicants to fill our positions.
3 There is an unfortunate _____ between the organization's goals and its actions.
4 Experts are studying the youngest sector in the labour force, which _____ workers between the ages of 18 and 24.
5 You have to be more _____ if you want people to listen to your ideas.
6 Our _____ costs were way too high, so we moved our operation to Vietnam, where workers' salaries are lower.
7 The staff in the admissions office regularly meet with _____ students to answer their questions and give campus tours.
8 For the last five years, there has been a _____ shortage of job applicants with skills in a wide range of technical areas.

THE SKILLS GAP

1 All over the world, business leaders and government officials complain about the 'skills gap'. Businesses have plenty of job openings, but they cannot find enough qualified applicants to fill the positions because workers' skills do not match those needed by employers. Figure 1 shows the results of an annual survey of about 42,000 companies worldwide.

2 For the most part, the employees that employers in western countries are seeking fall into two categories. The first category includes professionals in STEM fields (Science/Technology/Engineering/Mathematics) that require advanced training and **expertise**, especially in Information Technology (IT). The second category is much larger, **comprising** workers in the 'skilled trades'. Workers in the skilled trades have expertise in, for example, manufacturing, computers, electronics and construction. There are simply not enough workers with training in these areas to meet the growing demand. These jobs require more than a secondary education (for example, a training course to develop the required skill), but often they do not require a university education. In the United States, almost half of the **labour** force works in these kinds of jobs.

Figure 1. Percentage of companies with difficulty filling positions



Source: Manpower (2014)

Causes of the skills gap

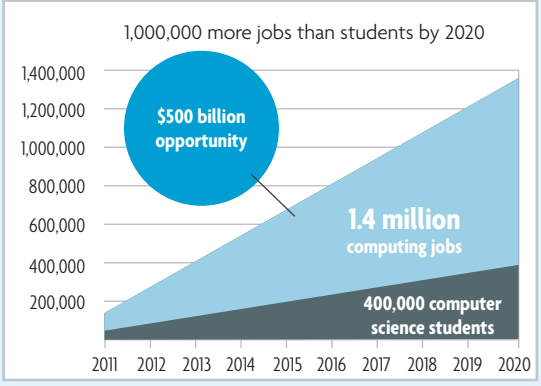
3 Why have we been unable to bridge this gap and prepare workers for the jobs of the future, or even the jobs of today? The answer lies in both the job market and the education system in many western countries. The job market is changing more quickly than ever before. Many of the jobs that companies need to fill today did not exist when current job applicants were in school, making it difficult for curriculums to keep up with the demands of the market. Nevertheless, numerous business leaders argue that schools are not doing enough to provide the technical training that many jobs demand. For example, only a quarter of all schools in the United States teach computer science. Most schools and universities continue to offer the same type of education that they have provided in the past. As a result, lots of students graduate with degrees that do not prepare them for the jobs that are available. Given this **mismatch** between the education system and the job market, several labour experts say we cannot and perhaps should not depend on traditional schooling to close the skills gap and should instead find alternative solutions.

Closing the skills gap

4 Both industry and academic experts argue that businesses themselves need to take a more **assertive** role in the preparation of the labour force they require. Businesses have the best information about what skills their employees will need, so it makes sense for them to participate in training **prospective** employees. First, they need to communicate better with schools and universities about the skills they require. Second, they should establish relationships with future employees earlier, perhaps through partnership schemes that begin training future employees while they are still students. Finally, businesses may need to develop and provide their own in-house training.

5 Technical skills, particularly computer science skills, are in high demand, but developing these skills is not necessarily best accomplished by means of a traditional university education. There are a wide range of schools, courses and training schemes that have opened in response to the demand for computer science professionals, some in brick-and-mortar classrooms and others online – technical colleges for the digital age. The top computer science schools are expensive, but some boast a 99% placement rate for their graduates, many of whom find positions that pay $100,000 a year or more. Figure 2 displays the predicted job growth in computing jobs.

Figure 2. The current state of the computer science job market



Source: Code.org

6 The skills gap is both **persistent** and expensive. One business expert estimates that a company loses $14,000 when a position remains open for three months. The skills gap is the result of many factors, and there is no single solution to the problems it **poses**. It is likely that a combination of approaches will be needed before the supply of qualified workers will be able to meet demand for them.

WHILE READING

5 Read the article. Then match the main ideas (a–f) with each paragraph (1–6).

a Schools that provide training in IT can help fill the skills gap. _____
b Employees in the skilled trades and with STEM training are in the greatest demand. _____
c There is no single solution to the skills gap. _____
d Current job applicants do not have the skills that employers are looking for. _____
e Businesses need to participate more in preparing future employees. _____
f Universities do not always offer an education with a clear career path. _____

6 Which of the statements in Exercise 5 expresses the main idea of the whole article? _____

READING FOR MAIN IDEAS

READING FOR DETAIL

7 Read the article again. Write *T* (true), *F* (false) or *DNS* (does not say) next to the statements below. Then correct the false statements.

_____ 1 Globalization has led to labour shortages in some developing countries.

_____

_____ 2 The most critical labour shortages are in IT fields.

_____

_____ 3 The positions that companies are trying to fill all require a university education.

_____

_____ 4 About 50% of workers in the United States are in the skilled trades.

_____

_____ 5 School curriculums have adapted to meet the new demand for technical skills.

_____

_____ 6 Businesses have the most accurate knowledge of the kinds of employees that are in demand.

_____

_____ 7 More than 1,000 IT schools and training schemes have opened to meet demand.

_____

_____ 8 An unfilled position that remains open for more than three months can cost a company more than $10,000.

_____

READING BETWEEN THE LINES

IDENTIFYING PURPOSE

8 Work with a partner. Answer the questions.

1 What is the purpose of this article?
   - **a** to persuade universities to change their courses
   - **b** to offer general information
   - **c** to warn employers

2 Where might you find an article like this?
   - **a** in a print or online magazine
   - **b** in a textbook
   - **c** in an academic journal

DISCUSSION

9 Work with a partner. Discuss the questions.

1 What do you think the $500 billion opportunity is in Figure 2?
2 Who do you think should take action to improve this situation?

READING 2

PREPARING TO READ

PREDICTING CONTENT USING VISUALS

1 Work with a partner. You are going to read an article about the value of a university education. Look at the graphs on page 145. Then discuss the questions.

1 Based on Figure 1, what generalization can you make about university education?
2 Look at Figure 2. What does *median income* mean? Are university-educated workers more likely to earn above or below the median income?
3 What do you think the topic of this article will be? What argument do you think it will make?

UNDERSTANDING KEY VOCABULARY

2 Read the sentences. Write the correct form of the words in bold next to their definitions below.

1 There is a **chronic** shortage of skilled workers in the technology sector. It's been impossible to hire enough workers.
2 Steve Jobs was a **founder** of Apple, Inc.
3 Business leaders **dispute** the government's claim that the number of jobs has grown.
4 The new training programme provides a good **illustration** of how the government and private sector can work together.
5 There is some **ambiguity** in the law, so it is difficult to know whether the company actually did anything wrong.
6 The Chief Technology Officer's responsibilities extend beyond IT; he plays **multiple** roles in the company.
7 The company's Chief Executive Officer **asserts** that profits will exceed expectations in the coming year.

a _____ (v) to disagree with an idea, a fact, etc.
b _____ (n) the state of being unclear or having more than one possible meaning
c _____ (n) someone who establishes an organization
d _____ (adj) very many
e _____ (adj) lasting for a long time, especially something bad
f _____ (v) to say that something is certainly true
g _____ (n) an example that explains something

PLUS

WHILE READING

READING FOR MAIN IDEAS

3 Read the article and check your ideas from Exercise 1.

4 Read the article. Write *T* (true), *F* (false) or *DNS* (does not say) next to the statements below. Then correct the false statements.

_____ **1** A university education is worth the investment.

_____

_____ **2** Graduates in the US make twice as much as those with just secondary school qualifications.

_____

_____ **3** Graduates generally have healthier lifestyles than those without a degree.

_____

_____ **4** Graduates are more likely to vote than those without a degree.

_____

_____ **5** Arts graduates have higher incomes than graduates with an engineering degree.

_____

_____ **6** Arts graduates have some advantages over graduates with technical degrees.

_____

5 Read the article again. Which of the statements in Exercise 4 expresses the main idea of the whole text? _____

READING FOR DETAIL

6 Look at the graphs in the article and answer the questions.

Figure 1

1 Which country had the highest percentage of graduates in 2012? _____

2 Which country had the largest increase in the percentage of graduates between 2000 and 2012? _____

3 What percentage of the Mexican population (25–64) had a degree in 2012? _____

Figure 2

1 Which country had the highest percentage of graduates with incomes more than twice the median? _____

2 Which country had the highest number of graduates with incomes at the country median or below? _____

3 What percentage of graduates in Brazil earned more than twice the median income? _____