

2

Learning about learning

READING | Multiple choice

→ Student's Book, pages 14–15

1 Read the article and match paragraphs B–G with headings 1–6.

- | | |
|--|---|
| 1 Why teens are good learners – and risk-takers ____ | 4 Development continues into adolescence ____ |
| 2 The creation of neural connections ____ | 5 It's all good news ____ |
| 3 The good news for teens ____ | 6 Benefits of plasticity for teens ____ |

2 Find words and phrases 1–6 in the article. Then choose the correct meaning (a or b).

- | | |
|---|---|
| 1 surge (paragraph B) | 4 acquire (paragraph D) |
| a) sudden increase in something | a) need something |
| b) a decrease in something | b) obtain something, get knowledge about |
| 2 neuroscience (paragraph B) | 5 equips (paragraph F) |
| a) the scientific study of the nervous system | a) provides someone with the things they need |
| b) science that is not based on facts | b) creates problems for |
| 3 neural (paragraph C) | 6 emotionally resilient (paragraph G) |
| a) relating to pain | a) with a tendency to suffer from negative emotions |
| b) relating to your nerves or nervous system | b) able to quickly become happy again after a problem |

3 Read the article again. For questions 1–6, choose the answer (A, B, C or D) which you think fits best according to the text.

- | | |
|---|---|
| 1 What does the writer say about the brain? | 4 As a result of their brain plasticity, teenagers |
| A The brain develops fully before a child is six years old. | A can learn to use new technology easily. |
| B The brain develops steadily until the end of the teenage years. | B don't learn as quickly as adults. |
| C There is another sharp increase of brain development in adolescence. | C should put off learning to drive. |
| D It has taken neuroscientists 40 years to understand the brain. | D often find their IQ decreases. |
| 2 What is true about neural pathways in the brain? | 5 The development of the prefrontal cortex during the teen years means that |
| A Adults still have all the neural pathways that were created in childhood. | A teenagers are especially receptive to learning new things. |
| B Every time we learn to do something new, we use 86 billion neurons. | B teenagers might do things without thinking about the consequences. |
| C Very few neural pathways are created in childhood compared to adulthood. | C young people are very good at controlling their emotions. |
| D Older people have lost some of the neural connections they used to have. | D it is impossible for adolescents to have abstract thoughts. |
| 3 Strong neural pathways mean that | 6 In Dr Daniel Siegel's opinion, |
| A adults can have more complex thoughts. | A learning about brain development can help teenagers. |
| B it is easier for adults to get really good at new skills. | B teenagers are not able to think critically. |
| C the brain is more flexible for learning new things. | C all teenagers are creative and courageous. |
| D adults are easily able to memorise new things. | D few teenagers are emotionally strong. |

PLASTIC IS PERFECT

The development of teenagers' brains and its implications for learning

A Why are teenagers so good at learning to use new technology? Why are their memories so excellent? Why can they pick up new skills with less effort than adults? The answer is that it's all due to brain development during adolescence.

B The brain is like an incredibly powerful computer. It is the centre of the human nervous system and directs our thoughts, movements, decisions and memories. Previously, scientists thought the brain stopped developing in childhood, but they now know that while 95% of the brain has developed by the age of six, there is a second important surge of development during the teenage years. Over the past 40 years, neuroscience researchers have begun to build a remarkably accurate picture of what exactly happens in the brain during adolescence.

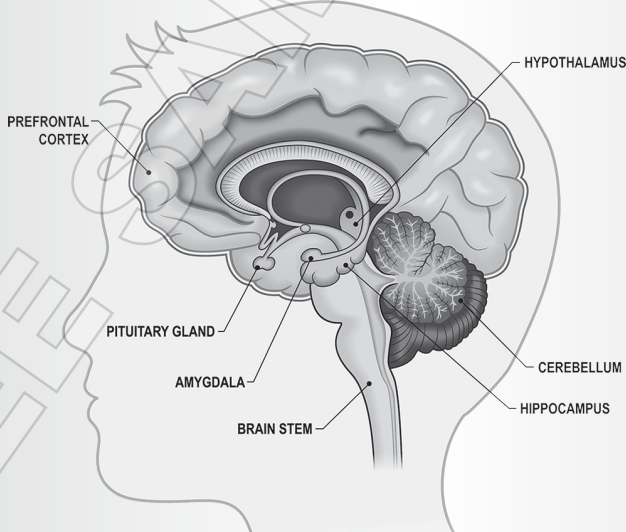
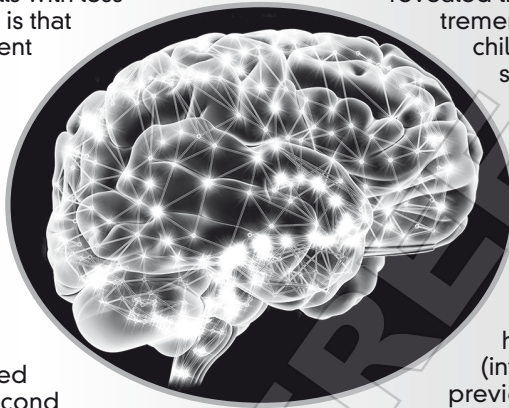
C One area of research has been neuroplasticity – that is, the brain's ability to change and reorganise itself by forming new neural connections. During childhood, the brain's 86 billion neurons create a multitude of connection patterns. Each time we learn to do something such as ride a bike or speak, neural pathways are created that allow us to repeat and improve upon the action. By adulthood, neural pathways that have been used frequently become 'fixed', whereas the less-used or unused pathways disappear. These stronger 'fixed' connections enable adults to have more complex thoughts and to carry out regular actions more effectively. However, the disappearance of other less-used connections reduces the brain's 'flexibility'. As a result, adults find it harder to master new skills or remember unfamiliar information.

D It used to be thought that teenagers' brains were similar to adults in this respect, but research has revealed that the teenage brain still has tremendous 'plasticity' – less than in childhood, but more than adults – and so teenagers are better at learning and memorising things than adults. This explains why they can quickly become so proficient at using new technology. It also means this is a great age to acquire new skills such as playing an instrument, learning to drive or speaking a new language. In fact, recent research has even shown that a person's IQ (intelligence quotient), which was previously thought to be unchanging, can improve in the teen years!

E Research has also shown a further difference in the prefrontal cortex (PFC) of teenagers and adults. The PFC is the area of the brain that's responsible for abstract thinking and thought analysis. It's like the 'command centre' of the brain, since it takes in information from the senses and decides how to respond. Its functions include organisation and planning, predicting the results of actions as well as regulation of emotion, paying attention and focussing on goals. Unlike in adults, the teenage PFC is still developing, which explains why teenagers can be impulsive and take risks – and why, although their brains are very receptive to learning, they find it hard to concentrate and make good choices.

F Psychiatrist Dr Daniel Siegel thinks that the teenage years are very exciting ones. In his bestselling book *Brainstorm: The Power and Purpose of the Teenage Brain*, he argues that the teen years are the most powerful life stage for activating purpose, creativity and courage. He believes that learning about how their brains work helps teenagers to develop their emotional intelligence and thought processes, allowing them to be the very best person they can be. It seems then, that the teenage years are the ideal time to learn problem-solving and critical thinking skills. Not only does this help develop the PFC, it also equips teens with valuable life skills.

G In conclusion, these two aspects of brain development are great news for teenagers. Firstly, their brain plasticity means they have an extraordinary ability to adapt to the world around them and learn. Secondly, the ongoing development of the prefrontal cortex means that, with insights into their brain development, teenagers can actually shape and change their brains to become better thinkers, more emotionally resilient and live up to their full potential.



1 Complete the sentences with the correct form of the verbs in brackets.

- I thought I _____ the answer, but I'm not so sure now. (**know**)
- Please stop talking! I _____ to listen to the lecturer. (**want**)
- He lost marks because he _____ all of the test. (**not complete**)
- Harry is looking bored in class because he _____ about ancient history. (**not care**)
- I always _____ to get a good night's sleep before an important exam. (**aim**)
- Water is unusual among liquids because it expands when you _____ it. (**freeze**)
- You're late! The bus for the museum _____ 10 minutes ago. (**leave**)
- Why is your tutor angry with you? _____ about your lesson? (**you / forget**)
- I'm sorry, but I _____ what you mean. Please explain it again. (**not see**)
- Carmen _____ upset. I wonder if anything is wrong. (**look**)
- _____ that man? I'm sure he's our old maths teacher. (**you / recognise**)
- I _____ the eye doctor every three months now. (**see**)

2 Complete the second sentence so it has a similar meaning to the first. Do not change the word given. Use two to five words, including the word given.

- My French teacher thought I was a good student, until I failed my test! **THINK**
My French teacher _____ I was a good student, until I failed my test!
- When I was at school, we usually did chemistry experiments on Friday morning. **WOULD**
When I was at school, we _____ chemistry experiments on Friday morning.
- My friend Sue has only just started teaching young adults. **USED**
My friend Sue _____ young adults.
- They didn't like it at first, but now the new students don't mind wearing a school uniform. **GOT**
Eventually, the new students all _____ a school uniform.
- The school that I go to teaches Japanese now. **DID**
The school that I go to _____ Japanese, but it does now.
- He looks unhappy and I don't think he's adapting to his new school. **GETTING**
He looks unhappy and I don't think _____ his new school.
- I think I know you. Were you a student at Huntingford High? **BE**
I think I know you. _____ a student at Huntingford High?
- The older students work hard, but it doesn't bother them now. **ARE**
The older students _____ hard now.

1 Choose the correct words. If both words are correct, tick the sentence.

- Guess what! I passed my driving test. I've got my **certificate** / **licence**!
- My grandfather left school at the age of 15 with no **degrees** / **qualifications**.
- How long did you **practise** / **revise** for your geography exam, Jack?
- It's hard to **pass** / **take** an exam when you're exhausted from studying all night.
- My economics **instructor** / **lecturer** has been at this university for over 20 years.
- I was late for training, so the **coach** / **instructor** told me to run around the track ten times.
- When I was a science **graduate** / **undergraduate**, I spent a lot of time in the college lab.
- Of all the **pupils** / **students** in his art class, Mr Smith believed that Karen was the most talented.

2 Complete the sentences with the phrasal verbs in the box in the correct form.

catch up with | come up with | creep up behind | dig up | end up | hurry up | look up | set up | speak up | use up

- For my technology project, I needed to find out who first _____ the idea for television. It wasn't easy to _____ the answer online, because apparently a few different people had the same idea at the same time.
- I couldn't hear the museum guide very well because she spoke so quietly. I was a bit shy and didn't want to ask her to _____, so I _____ leaving her tour and joining another one.
- Harry did a lot of research and managed to _____ a lot of information about the ancient Minoan civilisation of Crete. He wanted to print it and take it to school, but printing the first 20 pages _____ all of the ink.
- John and I saw Tom in the library and he and I decided to do something funny. 'Let's _____ him and scare him!' John suggested. 'OK, but we need to _____ - I think he's about to leave,' I replied.
- Helen didn't go to school for a month after she broke her leg. But she _____ the rest of the class without any problems. That's because her friends _____ a study group and each day two of them went to her house and helped her to study.

3 Match to make sentences. Use the words in italics to help you.

- | | |
|---------------------------------------|---|
| 1 They're <i>bored</i> ____ | a) <i>to</i> the teacher and didn't know about the test. |
| 2 He wasn't <i>interested</i> ____ | b) <i>against</i> voting for Grace as class president and chose Luke. |
| 3 She <i>criticised</i> Tim ____ | c) <i>on</i> their homework when the television is on. |
| 4 We <i>decided</i> ____ | d) <i>in</i> visiting museums and said they were boring. |
| 5 They're <i>experienced</i> ____ | e) <i>as</i> personal trainers and we are already working at a gym. |
| 6 They can't <i>concentrate</i> ____ | f) <i>with</i> working part time while you are a student. |
| 7 He didn't <i>pay attention</i> ____ | g) <i>with</i> learning French and want to try something different. |
| 8 We both <i>qualified</i> ____ | h) <i>in</i> preparing students for important language exams. |
| 9 She <i>succeeded</i> ____ | i) <i>in</i> passing all her exams; she was the best student of all. |
| 10 There's nothing <i>wrong</i> ____ | j) <i>for</i> not working hard on his part of the project. |

2

GRAMMAR 2 | Tenses (2): present perfect simple, past perfect simple

→ Student's Book, page 19 → Grammar reference, Student's Book, page 150

1 Put the verbs into the correct tense: present perfect simple, past simple or past perfect simple.

- By the end of the day, Lucy _____ seven different classes at college. (**have**)
- We _____ the new chemistry teacher yet. I hope she's nice! (**not meet**)
- When I woke up this morning, my sister _____ for college. (**already / leave**)
- I got to school and then I realised that I _____ my gym gear from home. (**not bring**)
- What are our teachers doing? _____ to mark our final exams yet? (**they / begin**)
- I'm so excited! This is the first time I _____ to such a famous scientist! (**speak**)
- I couldn't read the book because someone _____ funny pictures in it. (**draw**)
- You're studying hard again. You _____ until late every night this week! (**study**)
- '_____ for the test?' 'Of course not. That's why they failed.' (**they / prepare**)

2 Choose the correct words.

- He was very upset because he had **just / still** received his exam results.
- My English teacher has had the same car **for / since** twenty years.
- When / By the time** the physics lecture ended, Harry had fallen asleep.
- Sonia has **already / yet** competed in three maths competitions for her school.
- My cousin hadn't **ever / never** done an experiment in a laboratory before.
- He had lived in Oxford **for / since** his teens and he loved the atmosphere.
- He has applied to numerous universities but hasn't been successful **since / yet**.
- Once / Until** they had finished the exam, they were free to leave the classroom.
- It's the third time I've called you. Where have you **been / gone** all day?
- She left for university in 2016. **So far / Up to that point**, she had only lived at home.

- 1 Complete the table with the phrases in the box. One phrase can show agreement or disagreement depending on its use.

I can't see why not. | I know! | I wouldn't go that far. | Me neither! | Mine too. | No doubt about that.
Oh, I wouldn't say that. | Oh, yes, totally! | Sounds good to me. | Yes, to some extent, I suppose.

Agreement	Disagreement	Partial agreement

- 2 Complete the dialogue with the phrases in the box. Use the words in brackets to help you.

Me neither | Mine too | Not at all | You can't be serious

A: That Zumba class was a killer! I'm not as fit as I used to be, that's for sure.


B: (1) _____! I haven't got the energy to go swimming now. Would you mind if we just went straight home? (*completely agree*)

A: (2) _____ . I'll just call my brother and he can pick us up outside the gym. Unless you'd prefer to walk ... (*completely agree*)

B: (3) _____! I can't even stand up! (*completely disagree*)

A: No, I was only joking. Of course we're not going to walk. My feet are killing me!

B: (4) _____! (*completely agree*)

- 3  02 Listen and check your answers.

- 4  03 You will hear people talking in eight different situations. For questions 1–8, choose the best answer (A, B or C).

1 You hear two friends talking after a Zumba class. What do they agree to do?

- A go swimming after the class
B walk home from the gym
C leave the gym immediately

2 You overhear a boy talking on the phone about a judo club. Why is he talking to his friend?

- A to convince him to join the club
B to remind him that he likes judo
C to encourage him to get a black belt

3 You hear two girls talking about a driving lesson. What do they disagree about?

- A whether the driving lesson was boring
B why she shouldn't drive on public roads
C that she needs to be more confident

4 You hear part of an interview with a life coach. The man's involvement in the film was as

- A a trainer.
B an adviser.
C a life coach.

5 You hear a girl talking about a pet. What was the dog taught to do?

- A scare away other dogs
B wait for his food quietly
C carry things into the house

6 You hear two friends talking about a job. What do they agree about?

- A He will be the boss one day.
B It takes time to be successful.
C He should join the police force.

7 You hear a teacher talking about graffiti. Why will the students remove the graffiti?

- A They refused to reveal certain information.
B They would rather do it than stay at home.
C They have the necessary equipment.

8 You hear two boys talking about a survival weekend. What do they agree to do?

- A change their plans
B make a decision later
C go camping anyway

2

SPEAKING | Collaborative task

→ Student's Book, page 20

1 Choose the correct words.

- 1 **A:** I think there's a lot to learn about history at an art museum.
B: Oh, **absolutely / really!**
- 2 **A:** I doubt students can learn much at a theme park.
B: **So / Neither** do I. It's just a place to have fun.
- 3 **A:** An adventure activity centre is a great place to learn new skills.
B: You've got a **point / right**, but not all students enjoy physical activity.
- 4 **A:** I think you can learn a lot about planets at a space museum.
B: Me **also / too!** It's the best place for that.

2 Complete the missing words. The first letter is there to help you.

- A:** I'd say the internet is the best place to do research for your homework.
B: I'm sorry, but I (1) d_____. There's too much wrong information online.
A: You're (2) r_____ about that, but (3) d_____ you think that if you're careful, you can find good information?
B: I (4) s_____ so, but I think it's better to use books from a library.
A: Well, I prefer using my computer and doing my research at home.

2

USE OF ENGLISH | Word formation | Sentence transformation

→ Student's Book, page 21

1 Choose the correct words.

- 1 Charlotte never **got used to / used to** the weather in the UK when she was at university there.
- 2 He **didn't use to / wasn't used to** sleep very well when he had a computer in his room.
- 3 I used to **enjoy / enjoying** physical education at school, but I'm too lazy to play sport now.
- 4 I don't think the trainee teachers are used to **be / being** in a classroom environment.
- 5 Students on the intensive training course **didn't use to / weren't used to** the long hours.
- 6 Are you getting used to **working / work** part time in the evenings while studying?

2 Complete the second sentence so it has a similar meaning to the first. Choose one word from the box and any other words you need. Use between two and five words. Use *-ing* forms where possible.

1 concentrate | wrong

- a) I don't mind long lectures at university.
There _____ long lectures at university.
- b) Graduates need to think closely about how to find good jobs.
Graduates _____ good jobs.

2 experienced | succeeded

- a) She has taught adult learners for many years.
She _____ adult learners.

b) I finally managed to pass my driving test!

I finally _____ my driving test.

3 criticised | interested

- a) He received criticism because he didn't encourage the students.
He _____ the students.
- b) How many people want to learn a second language?
How many people _____ a second language?

3 Complete the second sentence so it has a similar meaning to the first. Do not change the word given. Use two to five words, including the word given.

- 1 First I read the book and then I saw the film. **HAD**
I _____ I saw the film.
- 2 My brother doesn't want to go to university. **AGAINST**
My brother _____ to university.
- 3 The new history teacher hasn't taught large classes before. **USED**
The new history teacher _____ large classes.
- 4 Are you listening to what I'm saying? **ATTENTION**
Are you _____ what I'm saying?
- 5 This building is a hotel now, but before that it was a library. **BE**
This building _____ a library, but it's a hotel now.

1 Complete the exam advice with the phrases in the box.

as | because | for example | In my opinion,
In my view | It seems to me | I would argue that
that is | this is why | since | such as

- 1 When you write an essay, you need to give your opinion about the topic. Useful phrases are:

_____, _____,
_____, _____

- 2 Try to justify your opinions by giving reasons and/or examples. Useful words and phrases to connect your ideas are:

_____, _____,
_____, _____,
_____, _____

2 Read the essay. Does the writer agree or disagree with the statement?

3 Read the information in the box. Then rewrite sentences 1–5 using the word given.

'Apprenticeships are a good idea for young people and for employers.' Do you agree?

Paragraph 2: apprenticeships are good for young people

- 1 Apprenticeships are a good thing for young people. They can learn practical skills. **BECAUSE**

- 2 They also earn money. They can be more independent. **SINCE**

- 3 Not all young people want to go to university; some want to start working or learn in a different way. Apprenticeships are a great solution. **THIS IS WHY**

- 4 Doing an apprenticeship is a good idea. You get the qualifications you know employers want. **I WOULD ARGUE THAT ... AS**

- 5 You get into employment quicker if you do an apprenticeship. There is more opportunity to progress in your career. **IN MY OPINION**

4 Read the ideas below. Then write a third paragraph with some or all of the ideas or using your own ideas. Include reasons and/or examples to justify them. Try to use the phrases in Exercise 1.

- apprenticeships can be adapted to specific roles in the company – great flexibility
- apprenticeships are an excellent way to recruit new staff – you get the skilled workers you need for the future
- employers can get funding and apprenticeships are a great way to attract people with new ideas to the company
- learning can be done in the workplace – no disruptions or interruptions, you can fit it in when it suits you

Paragraph 3: apprenticeships are good for employers

'Traditional teaching methods are better than flipped learning.'

Do you agree?

Whereas some people think that traditional classroom teaching techniques are best for students, I would argue that a flipped classroom is a very successful way of learning for several reasons.

In a flipped classroom, students learn new content at home by watching videos, and then work on problems in class. It seems to me that this has many advantages. For instance, students can learn at their own pace. Because they are at home, there are no interruptions from other students. Finally, they can use the video material to help them revise for exams.

In my view, the flipped classroom also has benefits for the teacher. For example, teachers can give personalised attention to students for the whole class time, not just a few minutes here and there. This is why all students are able to keep up easily. Flipped learning also allows the teacher to see who has understood the material and what things students find difficult.

To conclude, I disagree with the idea that traditional classroom teaching techniques are better than flipped learning. In my opinion, the flipped classroom is a fantastic and rewarding approach to learning.

James King

PROGRESS CHECK

1 Choose the correct words.

- I **haven't seen** / **had never seen** a dinosaur before I went to the museum.
- When Billy was younger, he **used to** / **would** live near his school.
- Martha **didn't drive** / **hasn't driven** her car since the accident.
- Have you bought** / **Do you buy** the books for your course yet?
- I didn't **use to take** / **used to taking** the bus to go to college.
- In primary school I had to wear school uniform and I **have hated** / **hated** it!
- Jeremy **has been** / **has gone** to the exhibition and he said it was great.
- Did it take you long to **be used to** / **get used to** driving on the left?
- It was the second time we **have spoken** / **had spoken** with the principal.
- I turned off the lights, locked the door and then **had left** / **left** the lab.

2 Complete the short texts with the words in the box in the correct form.

certificate | degree | dig it up | end up | graduate | interested in
lecturer | licence | pass | succeed in | undergraduate | wrong with

- A police officer stopped Frazer because he was driving too fast. He asked to see Frazer's _____, but Frazer didn't have one because he had never _____ his driving test. So Frazer _____ going to prison!
- Max was _____ studying science so he went to university and got a _____ in physics. Now he is one of the _____ at his old university and he teaches the _____ there.
- To get a new passport, Grandpa needed his birth _____ everywhere, but couldn't _____ . Luckily for Grandpa, my father _____ finding it for him. It was hidden in an old book!
- There's nothing _____ getting a job and not going to university. I mean, a lot of _____ can't find jobs anyway when they finish their studies.

Cumulative progress 1 2 3 4 5 6 7 8 9 10 11 12

3 Write a form of the word in capitals in each gap to complete the text.

The Theory of Multiple Intelligences

According to Harvard University professor Howard Gardner, there are nine different ways to be smart.

These intelligences, as he calls them, include characteristics that we normally associate with clever people, such as (1) _____ ability and being able to think (2) _____ or deeply like a philosopher.

But what if you're (3) _____ to think this way? What if you have an (4) _____ to understand abstract scientific ideas?

Does that make you stupid? In Gardner's view, absolutely not, because the range of intelligences covers all human abilities. For example, some of us are 'people smart' – it means we don't have (5) _____ understanding other people, and are in tune with their feelings and emotions. Gardner calls this 'interpersonal intelligence'. (6) _____ types are 'picture smart' and are good artists. If you're 'body smart', you can use a variety of physical skills and you have (7) _____ mind-body coordination, like dancers and surgeons do. But some scientists disagree with the theory.

They don't doubt the (8) _____ of different abilities, but they believe that Gardner's 'intelligences' are really just skills.

MATHS
LOGIC
ABLE
ABILITY

DIFFICULT

CREATE

IMPRESS

EXIST

