Train your brain!

We are born to learn. Watch a two-year-old child the first time you present her with a conker (see page 46). Notice how she focuses in on the new shape in front of her. Then watch as she puts all her senses to use, picking it up with finger and thumb, examining it from all sides, then rolling it around and banging it on the table before trying to put it in her mouth. Provide her with the name, give her some conkers to play with again the next day and that’s it: she’ll always remember what conkers are.

If we were so good at learning about the world at the age of two, why do we often find learning languages as adults difficult? On the next pages we’ll first take a look at our brain and memory, as well as the things that make us individual, such as the different ways we learn. In the second part of the article we’ll show, with the help of exercises and tips, how to use this knowledge to become a better learner.
Let's first look at the three different parts of the brain that are important for learning.

Your brain makes up about two per cent of your body weight, but it needs about 20 per cent of your oxygen intake to function. The brain stem (Stammhirn) works with your heart to make sure that enough blood is pumped to your brain for you to concentrate on what you are studying.

Have you noticed how you can usually remember a lot about things you really enjoyed — or hated? If you are nervous or worried about making mistakes or being laughed at, however, you have a mental block. There is a close link between our feelings and how well we remember things. In fact, the hippocampus, which some say contains the memory, is part of the limbic system, our emotional brain.

The neocortex, our thinking brain, helps us plan and deal with the complex activities and relationships in our lives. The neocortex is the part of the brain that likes getting involved in communication and problem-solving activities. It says: “Thank you for your input. Now I'd like to try this myself.”

Learning styles

We all have the same basic brain structure, but we learn in different ways. If you find a lesson or subject boring or difficult, you may be frustrated at not receiving the information in a form that you can easily process.

Do you need to see things before you understand them? Do you like to have a good view of the board in the classroom? You probably have a visual learning style. If you are an auditory learner, it is important for you to hear clearly. You prefer a quiet learning environment, enjoy following discussions and may be good at putting ideas into words. If you prefer moving around to sitting still at a desk for long periods and like to have something in your hands when learning, you have a kinaesthetic preference.

At this point we would like to apologize to all readers who would have preferred to hear this article on CD or to have taken part in an interactive workshop. Why? Because all of us have a mixture of visual, auditory and kinaesthetic learning styles. The more styles you use, the easier it is to remember new language.

Left and right

Another way of looking at the learning brain is to divide the neocortex into its two sides, or hemispheres. The left hemisphere is associated with logical and systematic processes. This is also where the two main language areas are found. The “left brain” likes a structure for learning; for example, an English lesson with clear learning targets. It enjoys problem-solving activities and grammar explanations.

The right hemisphere is more intuitive. It is stimulated by music, rhythm and colour, and sees the “big picture” rather than the details. The “right brain” likes to see an overview of the whole English course. It enjoys working with pictures and diagrams, and it likes the creative nature of role plays.

Of course, the two hemispheres are physically connected and work together. The more you actively involve each area in your learning, the more they can support each other and the stronger the connections that are made to the memory.

MULTIPLE-INTELLIGENCES THEORY

The theory of multiple intelligences was first suggested by psychologist Howard Gardner in 1983. Gardner has identified eight intelligences, including linguistic, mathematical, spatial and interpersonal. These correspond to our individual abilities and talents. The theory suggests that in order to learn well, we — and our teachers — need to know where our strengths lie, and that we also need to work on the intelligences that are not so well developed.
How do we remember? Why do we forget?

The memory is hugely complex and not completely understood. Looked at simply, it consists of two parts, the short-term and the long-term memory. The short-term memory can hold only about seven items at a time. The long-term memory has an unlimited capacity and is made up of networks, called “schemas”. To find its way into the long-term memory, information such as new English words needs to be able to find a home in such a network. These networks are essential for effective learning. The more networks there are, the easier it is to find a home. The more interconnected and organized the networks in your long-term memory are, the easier it is to find the words and phrases when you need to speak or write them later.

When we are not motivated to remember something new, it just disappears from our short-term memory. We forget it. We forget things we think we have already learned when they don’t have enough connections to our memory networks and when they are not used often enough. In many cases, we don’t want to remember things that were stressful or traumatic. New memories may override (außer Kraft setzen) old ones, or old memories may prevent new ones being stored.

Look at the words in the box below for one minute. Then close the magazine, take a piece of paper and write down as many of the words as you can remember.

- sheep
- river
- chair
- bed
- cloud
- pig
- goatee
- dog
- table
- door
- cow
- farm

Look at the words you have written down and ask yourself how you remembered them. Everybody will have his or her own method of doing this, probably involving one or more of the following activities:

- making a story or stories with the words
- putting the words in sense groups such as animals, the interior of a room, and so on
- making a picture out of the words; e.g. a pig sitting on a table
- personalizing the words; for example, picturing your favourite chair or river
- putting words together, such as sheepdog, river bed, pig farm

You probably remembered the word in blue and the first and/or last word you read. You might have remembered “goatee” because it looks like “goat”, but without knowing what it means (Ziegenbart).

Although the exercise above tests only your short-term, working memory, it reveals some important things about language learning:
- Everyone has different preferences for learning and remembering.

As soon as you try to learn something, like a word, your brain immediately wants to organize it and give it meaning. It does this by engaging the senses, by using colour and pictures, by trying to make connections between words, and by linking them to something familiar.

Build your internal dictionary

Now that you know more about the brain, look at how you can turn your memory into a complete, cross-referenced, user-friendly mental dictionary.

Energy levels

Your brain stem is happy when you are warm or cool enough, and when you are not hungry, full, thirsty or tired. You probably know whether you need silence, the hum (Summen) of the fridge, Bach or Bruce Springsteen in order to learn well. Take breaks. Get up and hang the washing on the line, and drink lots of water. If you find it difficult to focus, however, give yourself ten-minute blocks where you are not allowed to check your e-mail or phone a friend.
Get organized
You are the only person who can learn the English you need, so take responsibility for your learning. Organize your learning times; for example, set a regular time each day or week for self-study. Divide your vocabulary notebook into different sections for grammar, vocabulary and so on. This will engage your left brain. When you get your issue of Spotlight each month, keep your right brain happy by first looking through the headlines and pictures.

Use the contents pages of Spotlight to cross off the pages that you have read. In your vocabulary book or on your vocabulary cards, always note the article and page number where you found the word.

Make choices
Remember that your short-term memory can hold only about seven items, so don’t try to remember the whole word list from our travel article on Jordan. Choose words in which you want to invest. If you don’t make this investment, you will just waste time relearning words.

Find an article that you have enjoyed, and choose seven items from the text and/or word list that you think will be a good investment.
Be active
Engaging your senses, making mental images, using humour — all of these stimulate different parts of the brain, increasing and strengthening the messages being sent to the memory. Whether you write, draw, tell jokes or stories, or ask questions using the words you want to learn — the more you interact with the words, the stronger and more meaningful the connections to your long-term memory will be.

Make pictures in your mind. Make these mental images move, and make them in colour and larger than life. Use a variety of coloured marker pens for your vocabulary notes. Have a system: for example, highlight social English phrases in orange and phrases to use at meetings in green. When taking vocabulary notes, draw pictures instead of writing explanations if you can. Use symbols in your work, for example, warning triangles for typical mistakes or smileys for words you really like.

Get connected
Some very old memorizing techniques work by making connections — by association. They can help you to memorize things quickly and easily, and then to be able to remember them for a long time afterwards. Rather than just being tricks, it is now known that these techniques, called mnemonics (Eselsbrücken), just use the brain’s natural ability. Here are some examples.

If you are having difficulty learning a word, think of a term that sounds the same in German, and build a mental picture of the two items together. For example, if you always forget the word “sparrow” (Spatz), then think of the German “Sperre” and imagine a line of birds blocking your way.

Another technique is to establish a route in your mind through a house that you know well. You then “place” one of the items you want to remember in each room and review the words by walking the route. A third technique is the number-rhyme system. First, establish a rhyming word for each number from one to ten, for example one = gun, two = shoe, three = tree. You pick ten words to learn, and associate each with one of the rhyming words. For example, if you want to learn “mock” (page 34), you might link it to two-shoe, and imagine a pair of bright green mockalligator shoes.

As we saw in the exercise on page 16, your brain can’t deal with words in isolation. It wants to group them together or to make sense of them with the information you already have. The clearer the group or the context, or the bigger the “chunk” (Stück) of language, the more connections will be found to the long-term memory. So make associations to the things you already know. Always start your study time by reviewing your notes from the previous session, and finish by summarizing what you have just done.

Before you look at Vocabulary (pages 46–47), ask yourself how many trees and parts of trees you can name in English. After you have worked on the Vocabulary pages, think of particular trees you know in places you love and name them in your mind in English.
Mind maps
Mind-mapping is a non-linear method of note-taking and study. It links key words and ideas in a similar way to that in which the brain is thought to organize and link information. Mind maps were first made popular by Tony Buzan, who has introduced many people to memory-training techniques. Here's an incomplete mind map on the subject of I Ask Myself (page 26). Complete the branches with words from the article.

Remember, remember, remember!
There are another three “R’s that are well known in the English-speaking world (in addition to “reading, writing and arithmetic”) that encourage us to be environmentally friendly. We can apply them here to learning.

Reduce
Don't try to learn everything! Just as we choose 15 words and phrases from all our word lists for the Word Builder on pages 57-58, select what is important to you.

Reuse
Make sure you work with the language as often as possible. Some people say you need to look at it after ten minutes, after 24 hours, after a week and after a month.

Become kinaesthetic by testing yourself with your vocabulary cards.
Study your vocabulary notes, or run through words in your head before you go to sleep at night. The dreaming phase of sleep is thought to be especially important in consolidating learning.
Tell somebody about an article you have read using the new words you have learned from it.

Recycle
You will need to use new language in different contexts before you can really say that it has found a place in your internal dictionary.

Choose six words from your vocabulary bank. Write them at the top of a piece of paper and then give yourself two minutes to write a quick story using all the words.

The two-year old child has one mission in life: to learn. Our adult lives are full of things that get in the way of learning, that make the connections in our brain become loose or confused. In this article, we have presented you with lots of brain-friendly ideas on learning languages. Now it's up to you to select those ideas that you think will be useful to you personally. Why not drink a glass of water, take a piece of paper and some coloured pens, and try out a mind map of this article — just to start with? You have an amazing brain, so use your head!

FURTHER INFORMATION
http://www.bgfl.org/bgfl/custom/resources_ftp/client_ftp/ks3/ict/multiple_int/offers a clear introduction to multiple-intelligences theory and a test that you can do.

www.brainboxx.co.uk offers all sorts of games for learning and a section on learning styles.

Use Your Head by Tony Buzan (BBC Active, ISBN 978-0-56-348899-6) is a useful introduction to memory techniques, including mind-mapping.

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