
BBC LEARNING ENGLISH

6 Minute English

A future without doctors?



This is not a word-for-word transcript

Neil

Hello. This is 6 Minute English from BBC Learning English. I'm Neil.

Sam

And I'm Sam.

Neil

Are you feeling well, Sam? No headache or sore throat?

Sam

No, I feel fine thanks, Neil. Why do you ask?

Neil

Well, I've been reading some inspirational stories about the doctors and nurses fighting Covid. When I was a boy, I always dreamed of becoming a doctor.

Sam

Ah, I see. Have you ever been in hospital?

Neil

Yes, I have, and I remember the nurse's **bedside manner** – you know, the kind and caring way that doctors and nurses treat people who are ill.

Sam

Nowadays more and more of the jobs that humans do are being carried out by machines. But I doubt that a doctor's **bedside manner** could easily be replaced by a robot.

Neil

In this programme, we'll be discussing whether the revolution in artificial intelligence, often shortened to 'AI', could replace human doctors and nurses. We'll be asking: can you imagine a future without doctors?

Sam

In fact, machines are already doing some of the jobs traditionally done by doctors - scanning people's bodies to detect skin cancer, for example.

Neil

Yes, that's true, Sam, and it links to my quiz question which is about human skin. It's a well-known fact that skin is the human body's largest organ – but how much skin does the average adult have? Is it:

- a) 2 square metres?,
- b) 3 square metres? or,
- c) 4 square metres?

Sam

Of course our skin gets loose as we age but I can't believe there's 3 square metres of it! I'll say the answer is a) 2 square metres.

Neil

OK, we'll find out if that's correct later. Every year in the UK over 5 million people are treated for skin cancer. Catch it early and your chances of survival are increased.

Sam

Usually a skin specialist, or dermatologist, will examine your skin using a handheld microscope. But in 2017, a team of researchers at Stanford Medical School made an exciting announcement.

Neil

Here's Oxford University researcher Daniel Susskind, telling BBC World Service programme, The Big Idea, what the medics at Stanford had invented:

Daniel Susskind

A team of researchers at Stamford last year announced the development of a system that, if you give it a photo of a **freckle** it can tell you as accurately as twenty-one leading dermatologists whether or not that freckle is **cancerous**.

Sam

The Stanford medical team had invented an AI system to analyse **freckles** – small brown spots found on people's skin, especially on pale skin.

Neil

As it turned out the AI programme was better than human doctors at telling whether a freckle was harmless or **cancerous** – connected to some type of cancer.

Sam

So, it seems that artificial intelligence is already replacing humans when it comes to detecting cancer – and doing a better job of it.

Neil

But Daniel Susskind isn't convinced. One reason is that AI systems still need humans to programme them – and as it turns out, knowing exactly how doctors detect illness remains something of a mystery.

Sam

Here's Daniel Susskind again in conversation with BBC World Service programme, The Big Idea:

Daniel Susskind

If you ask a doctor how it is they make a **diagnosis**, they might be able to point you to particularly revealing parts of a reference book or give you a few **rules of thumb**, but ultimately they'd struggle... they'd say again it requires things like creativity and judgment, and these things are very difficult to articulate – and so traditionally it's been thought very hard to automate – if a human being can't explain how they do these special things, **where on earth** do we begin in writing instructions for a machine to follow?

Neil

Most doctors find it difficult to explain how they make a **diagnosis** – their judgement about what someone's particular sickness is, made by examining them.

Sam

Diagnosing someone's illness is complicated but there are some **rules of thumb**. **A rule of thumb** is a practical but approximate way of doing something.

Neil

For example, when cooking, a good rule of thumb is two portions to water to one portion of rice.

Sam

Exactly. And because identifying sickness is so difficult, Daniel says "**where on earth** do we begin writing instructions for a machine?" We use phrases like **where, how or what on earth** to show feelings like anger, surprise or disbelief.

Neil

I might show surprise by asking Sam, '**how on earth** did you know the answer to *that?*'

Sam

Ha ha! I guess you're talking about your quiz question, Neil? And you needn't be surprised – I'm naturally brainy!

Neil

Of course you are. In my quiz question I asked Sam how much skin there is on an adult human body.

Sam

And I said it was a) 2 square metres.

Neil

Which was... the correct answer! With your brains I think you'd make a good doctor, Sam, and I'm sure you'd have a good **bedside manner** too.

Sam

You mean, the kind and caring way that doctors and nurses treat their patients. OK, let's recap the rest of the vocabulary, starting with **freckle** – a small brown spot on someone's skin.

Neil

Freckles are usually harmless, but some skin spots can be **cancerous** – connected to cancer.

Sam

A doctor's **diagnosis** is their judgement about what someone's particular sickness or disease is.

Neil

A **rule of thumb** is a useful but approximate way of doing or measuring something.

Sam

And finally, we use phrases like **where on earth..?** as a way to show emotions like anger, surprise or disbelief.

Neil

That's all for this programme but join us for the next edition of 6 Minute English when we'll discuss another trending topic and the related vocabulary.

Sam

Why on earth would you miss it? Goodbye for now!

Neil

Goodbye!

VOCABULARY

bedside manner

the kind and caring behaviour shown by doctors and nurses to people who are ill

freckle

small brown or ginger spot on someone's skin, especially a person with pale skin

cancerous

involving cancer

diagnosis

a doctor's judgement about what someone's particular sickness or disease is, made after examining them

rule of thumb

a useful and practical but approximate way of doing or measuring something

where, how, what, why on earth...?

an emphatic way of forming a statement or question to show frustration, anger, surprise or disbelief