

We may be able to learn vocabulary while sleeping

6th February, 2019



A new study shows that we could learn vocabulary while we are sleeping. This is great news for students struggling to learn a new language. It is also good for anyone who is trying to

expand their knowledge of words. Researchers from the University of Bern in Switzerland have shown that it is possible to learn new information while we are sleeping deeply, and then recall this information when we need it after we wake up. This new information includes foreign language vocabulary. The researchers conducted tests on whether or not a person can remember new words and their translations while they were asleep. They said our sleeping brain is much more aware of the outside world than we thought.

Researcher Marc Züst said, "language areas of the brain and the hippocampus - the brain's essential memory hub - were activated" after a person woke up. He said these areas of the brain allow us to remember vocabulary during deep sleep. The researchers said that during deep sleep, our brain cells are active for a short period of time - about half a second. The cells then enter into a period of inactivity - again, about half a second. The active state is called "up-state" and the inactive state is called "down-state." The "up-state" period is the time when our brain could learn new vocabulary. The researchers say more research is needed to be 100 per cent sure that we can learn vocabulary while asleep.

Sources:
interestingengineering.com / sciencedaily.com / eurekalert.com

Writing

Sleep is for sleeping, not for learning vocabulary. Discuss.

Chat

Talk about these words from the article.

study / sleeping / language / knowledge / possible / information / vocabulary / aware / brain / essential / memory / active / remember / inactivity / time / period / asleep

True / False

- a) This story is great news for people struggling to learn a language. T / F
- b) The research was conducted by researchers from a Swiss university. T / F
- c) Researchers tested language translations while people were asleep. T / F
- d) Our sleeping brain may be more aware of things than we thought. T / F
- e) The hippocampus is the part of the brain used to forget things. T / F
- f) In deep sleep, our brains are active for half-a-second at a time. T / F
- g) A sleeping period called "up-state" allows us to learn vocabulary. T / F
- h) The researchers are 100% sure we can learn vocabulary while we sleep. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|----------------------|----------------|
| 1. struggling | a. remember |
| 2. expand | b. testing |
| 3. recall | c. certain |
| 4. conducted | d. vital |
| 5. aware | e. time |
| 6. essential | f. grow |
| 7. allow | g. did |
| 8. period | h. conscious |
| 9. research | i. trying hard |
| 10. sure | j. permit |

Discussion – Student A

- a) How important is sleeping?
- b) What is the best way to learn vocabulary?
- c) What do you think of learning vocabulary while sleeping?
- d) Is sleeping only for sleeping?
- e) Could there be any dangers to learning while asleep?
- f) How happy are you with your vocabulary?
- g) What are your three favourite English words?
- h) What else could we learn while we are asleep?

Phrase Match

- | | |
|---------------------------------|----------------------------|
| 1. we could learn vocabulary | a. deeply |
| 2. This is great | b. woke up |
| 3. struggling to | c. called "up-state" |
| 4. while we are sleeping | d. news for students |
| 5. new words and their | e. to be 100 per cent sure |
| 6. after a person | f. a second |
| 7. brain cells are active for a | g. while we are sleeping |
| 8. about half | h. translations |
| 9. The active state is | i. learn a new language |
| 10. more research is needed | j. short period of time |

Discussion – Student B

- What do you think about what you read?
- What do you know about the brain?
- What problems do you have learning vocabulary?
- Will we be able to inject languages into the brain one day?
- How well do you sleep?
- How do you think this method works?
- Will you try learning vocabulary while you are asleep?
- What questions would you like to ask the researchers?

Spelling

- lutngggrsi to learn a new language
- expand their knwgedelo
- recall this noirfmtanio
- onrfgie language vocabulary
- new words and their sanltastnoir
- more aewra of the outside world
- the brain's seneatisl memory
- vataectid after a person woke up
- these eraas of the brain
- nrdugi deep sleep
- more hcaserer is needed
- be 100 per cent rsue

Answers – Synonym Match

1. i	2. f	3. a	4. g	5. h
6. d	7. j	8. e	9. b	10. c

Role Play

Role A – New Vocabulary

You think new vocabulary is the best thing to listen to while you are asleep. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): motivational quotes, your heart or the sea.

Role B – Motivational Quotes

You think motivational quotes are the best thing to listen to while you are asleep. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): new vocabulary, your heart or the sea.

Role C – Your Heart

You think your heart is the best thing to listen to while you are asleep. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): motivational quotes, new vocabulary or the sea.

Role D – The Sea

You think the sea is the best thing to listen to while you are asleep. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the worst of these (and why): motivational quotes, your heart or new vocabulary.

Speaking – Sleep

Rank these with your partner. Put the best things to listen to while we sleep at the top. Change partners often and share your rankings.

- | | |
|--------------|-----------------------|
| • poetry | • new vocabulary |
| • nothing | • motivational quotes |
| • the news | • music |
| • your heart | • the sea |

Answers – True False

a	T	b	T	c	F	d	T	e	F	f	T	g	T	h	F
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Answers to Phrase Match and Spelling are in the text.