

OBSERVATORY

How Immersion Helps to Learn a Language

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Learning a foreign language is never easy, but contrary to common wisdom, it is possible for adults to process a language the same way a native speaker does. And over time, the processing improves even when the skill goes unused, researchers are reporting.



Chris Gash

For their [study](#), in the journal PLoS One, the scientists used an artificial language of 13 words, completely different from English. “It’s totally impractical to follow someone to high proficiency because it takes years and years,” said the lead author, [Michael Ullman](#), a neuroscientist at Georgetown University Medical Center.

The language dealt with pieces and moves in a computer game, and the researchers tested proficiency by asking test subjects to play the game.

The subjects were split into two groups. One group studied the language in a formal classroom setting, while the other was trained through immersion.

After five months, both groups retained the language even though they had not used it at all, and both displayed brain processing similar to that of a native speaker. But the immersion group displayed the full brain patterns of a native speaker, Dr. Ullman said.

He and his team used a technique called electroencephalography, or EEG, which measures brain processing along the scalp.

The research has several applications, Dr. Ullman said.

“This should help us understand how foreign-language learners can achieve nativelylike processing with increased practice,” he said. “It makes sense that you’d want to have your brain process like a foreign speaker.”

And though it may take time, and more research, the work “also could or should help in rehabilitation of people with traumatic brain injury,” he added.

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