

**Cross-Curricular Discussion: Q**

**Directions:** The following list of discussion questions is provided to help you take notes, brainstorm ideas and test your thinking in order to be more actively engaged in class discussions related to this article. All questions in this section are related to topics covered in "[There's extra time to learn a language.](#)"

**BIOLOGICAL SCIENCES****Discussion question:**

1. What is the Indo-European language family?

**Extension prompts:**

2. What is neuroplasticity?

3. What are mnemonics? Give an example of a mnemonic device that you have used this year.

## ENGINEERING AND EXPERIMENTAL DESIGN

### Discussion question:

1. How can computer programs support language learning? Give specific examples.

### Extension prompts:

2. How well can computer programs translate languages? Compare Google Translate ([translate.google.com](https://translate.google.com)) and DeepL ([deepl.com/translator](https://deepl.com/translator)). In the left-hand boxes of each program, type in a sentence or a paragraph in proper English. Then have each program translate it into the language of your choice. The translation will appear on the right side of the screen. Now, cut and paste the translation back into the left-hand box to have the program translate it back to English. What sorts of errors did the computer introduce? Compare these two programs.

3. What are some potential difficulties in conducting and analyzing survey studies, such as the one in "[There's extra time to learn a language](#)"?