Learning foreign vocabulary: Imitation versus retrieval practice

What the study is about and why this research is important

In a world that is becoming increasingly globalized, the ability to communicate in a second language (L2) is important for many people. One crucial first step is learning sufficient L2 vocabulary in order to express ideas in the L2. In L2 vocabulary learning, either in classroom-based instruction or through the use of language-learning computer software, imitation training is omnipresent, during which a learner is given the model pronunciation of a word and immediately repeats the word according to the model. However, accurate pronunciation is insufficient for effective communication in the L2; learners also need to learn the meaning of L2 words and the concepts associated with them. This study investigated whether retrieval training, where learners produce an L2 word before they hear the model pronunciation (referred to here as retrieval training), is more effective than imitation for the acquisition of new L2 vocabulary. English native speakers either received imitation training or retrieval training on 40 Hebrew nouns. The results show that retrieval training led to better comprehension and production of the newly learned vocabulary items as compared to imitation training.

What the researchers did

• Forty-one and 59 English speaking university-level students unfamiliar with Hebrew participated in two separate experiments. The two experiments differed in two ways: the amount/length of training and the time of testing after training (either immediately or after a delay). Participants learned 40 Hebrew words from four categories (10 words each): body parts, eating/food, animals, and household objects. Two categories each were assigned to imitation or retrieval training.

• During imitation training, participants saw a picture of a word, heard a native-speaker pronunciation of the word, and were encouraged to repeat the L2 word immediately after the recording. During retrieval training, participants saw a picture of a word but were encouraged to say the L2 word before hearing the native speaker recording. This procedure was repeated three times with all 40 Hebrew words in Experiment 1 and six times in Experiment 2.

• In Experiment 1, participants were tested immediately after training, while in Experiment 2, there was a 2-day delay between training and testing. Testing included both comprehension (participants were to choose the correct picture from 40 choices to match an L2 word presented aurally) and production (participants named pictures) of the new L2 vocabulary. A native speaker of Hebrew scored the productions as correct if they were good enough to be understood, and also judged the pronunciation accuracy on a 10-point scale.

What the researchers found

• In the picture-matching comprehension task, participants were more accurate with words they had trained through retrieval practice than words they had trained through imitation practice. This was the case across both experiments, thus immediately after training and also following a 2-day delay.

• In the picture-naming production task, participants were also more accurate with words they had trained through retrieval practice than words they had trained through imitation practice. This was again the case both immediately after training and also following a 2-day delay.

• During training, words that were repeated after the native speaker recording in the imitation training were judged as correct more often and of higher pronunciation quality than words participants produced during the retrieval training. This was consistent across both experiments. However, among all words that were produced correctly in the picture-naming production task during the testing phase, there were no differences in the quality of pronunciation, regardless of whether the word was trained through imitation or retrieval.

Things to consider

• While imitation training for L2 vocabulary learning is widely popular in L2 classrooms and in language-learning computer software, in this study retrieval training was a more effective way to associate L2 words with their meanings, without being detrimental to pronunciation accuracy.

• At no time during training were English translations to the L2 Hebrew words provided; participants only saw pictures to connect the L2 words to their meaning. This may suggest that providing L1 translations is not necessary for acquiring L2 vocabulary that can be accurately depicted with pictures.

• Providing L1 translations for L2 words, as is common practice in L2 classrooms, may have an additional and different impact on the effect of imitation vs. retrieval training not investigated by this study.


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