Porter, Alison (2016) A helping hand with language learning: teaching French vocabulary with gesture Language Learning Journal, 44, (2), pp. 236-256

Using gesture to help young children learn and remember vocabulary

What this study was about

The study looked at the use of gesture as a teaching technique to help children remember and recall vocabulary and chunks of language that they were learning through stories as part of their second language lessons.

What the researchers did

Two mixed-age classes took part in the study (reception class, year 1 and year 2; ages 4 to 7). There were 40 children in total with an average age of 5 years 10 months, but only data from those 24 which had been present throughout all stages of the study were included in the analyses. All the children had English as their first language. Children aged 5 to 7 had already received 10 weeks of language teaching in the Summer before the study began (one 45-minute lesson each week), but when their language knowledge was assessed, only some of the children (8) knew two of the language chunks in one of the stories. As this was not the story accompanied by gesture, this was not seen to be a problem. The teacher was also the researcher.

Two short stories were presented to the classes during one lesson a week for three weeks. The stories were very short, and specially adapted to match in terms of the number of words, the number of syllables and the type of structures they contained. The teacher checked that children understood the meaning of each chunk in English before the presenting the story in the second language. Each story was accompanied by a slide presentation which illustrated each language chunk. The second story was accompanied by gesture, and children were encouraged to use the same gestures. The gestures were mostly obvious (iconic), and were chosen to accompany syllables rather than words, since learners listening to an unknown language are more likely to notice syllables than whole words. The second and third teaching sessions were video recorded. The teacher kept strictly to the text of the stories to ensure that both were presented in the same way. Children's recall was assessed immediately after completion of the study, and again after two weeks. Children were assessed in groups of four, identical for both assessment sessions. The children viewed the slides again, which prompted them to recall the language chunk which the slide illustrated. These assessments sessions were video recorded.

Example of gestures (left), and related slide (right)

Je	point to self
suis	sweeping movement
triste	mimes crying

What they found

When children were assessed immediately after the storytelling event, there was a significant difference between the children's immediate recall of language chunks. Children recalled many more chunks from the second story (visuals and gesture) than they did from the first story (visuals only). The best children recalled 94.1% of language chunks from the story with added gesture, whilst the best children recalled only 78.6% from the story with only visuals. This effect size was large. It suggests that the gestures used actively by the teacher and the children helped the children to remember what had been taught. However, when the children were assessed again after another two weeks, this difference had nearly disappeared. Children still remembered more language chunks from the second story (visuals and gesture; 70.6%) than the first story (visuals only; 64.3%), but the difference was not large enough to be statistically significant. This suggests that the addition of gesture on top of the picture presentation was still effective. The rate of loss over the two weeks between assessments for the story with just visuals was 12.3%, but was almost four times as high for the story with visuals and gesture: 27.5%. This suggests that structured support, slides and gesture, helped the children with their immediate memory recall, but that over time without repetition and lots more practice, the children's recall dropped quite sharply.

Things to bear in mind

Structured support appears to help children remember words and chunks of language. Both stories were accompanied by slides which acted as support; the contribution of gesture to memorisation might be reduced without supporting visuals. It was not possible to tell from this study whether one type of gesture might be more useful than another. The effect of gesture as an additional support might not have been so obvious as it might have been if used alone.

Summarised by Tellier, A. J. & Porter, A. February 2018.