False friends are known to be problematic for Spanish students of English since they make assumptions on the foreign language that are very frequently inaccurate. This pilot study is based on a previous analysis of how language learners use these tricky words in their interlanguage. The results of that analysis showed that there are problems at the levels of meaning, syntax and phraseology. In this preliminary survey I look at 10 false friends, starting from the hypothesis that, if it is possible to identify in each language distinctive lexical collocates for false friends, then learners will be able to better understand their differences in meaning and usage. The aim is thus to find out phraseological differences between English and Spanish that might help students to use false friends correctly. The results from the study are expected to open new paths for further research on the topic.