Judgment of learning tasks (JOLs) require participants to rate the probability that they can correctly a recall a target word from a studied cue-target pair (e.g., credit-card) if only shown the cue word at test (e.g., credit-\_\_\_). Prior work has shown that the associative direction of the cue-target pair can influence the accuracy of JOLs: Forward associative pairs (e.g., credit-card) are well calibrated (i.e., JOL estimates and recall accuracy were similar), but an illusion of competence emerges for backward pairs (e.g., card-credit) where JOL ratings are inflated relative to recall accuracy. The present study expands this idea by examining whether different study strategies can affect, or even improve, our memory for the word pairs. The study strategies examined were item-specific study, in which participants were told to think about how the words in each pair were unique, related study, in which participants were told to think about how the words in each pair were unique, and read only study that served as a control. Participants studied the word pairs according to the group they were assigned to, completed a filler task, and then completed a recall task in which they were given the cue word and asked to recall the target word. Participants JOL ratings were compared with their recall rates, and the illusion of competence was replicated across all study groups. Interestingly, in the Item-Specific Study group the illusion of competence was reduced for the backward pairs, and in the Relational Study group, the illusion of competence was reduced for the unrelated pairs.