Judgments of learning (JOLs) are people's predictions about their future memory performance. Eliciting JOLs can alter memory performance as opposed to just studying, a phenomenon known as JOL reactivity. Previous research has suggested that JOL reactivity can arise under different circumstances. Yet, a systematic examination of how list composition affects JOL reactivity is still lacking. Numerous memory phenomena (e.g., generation, bizarreness) that are accommodated by item-specific and relational processing are moderated by list composition: their effects on free recall are much stronger in mixed compared to pure lists – which is referred to as the design effects (McDaniel & Bugg, 2008). The current study aimed to provide a test of the item-specific/relational account of JOL reactivity by examining if it is moderated by list composition. This poster introduces the first experiment of a series of three experiments. Specifically, we examined if JOL reactivity is influenced by list composition. The result shows that the critical list type X encoding type interaction was significant in the experiment: as expected, JOL reactivity was larger in the mixed compared to the pure lists.