After hearing a novel label for an object, young children typically generalize it based on shape and/or function. Label generalization may also be affected by the specificity of children’s pre-existing representation of the object. The more detailed this representation, the less likely children may be to extend the label to other objects.

A previous study obtained support for this hypothesis in 4-year-olds, but not in younger children or adults. The goal of the dissertation was to test this representation specificity hypothesis in first graders. In Experiments 1 and 2, first graders were presented with novel artifacts or toy creatures. Children were asked to find a target object in a large set of objects. In the similar condition, two of these objects were very similar to the target object. In the dissimilar condition, none of the objects were similar to it. Children were hypothesized to develop a more detailed representation of the target object in the similar condition. Children were taught a name for the training object and then asked to extend it to other objects. For artifacts, children performed in a manner consistent with the representation specificity hypothesis, extending the label to fewer objects in the similar than in the dissimilar condition. However, for toy animals, this response pattern was reversed. Experiment 3 investigated one explanation for why results were different for animals than for artifacts. According to the shared context hypothesis,
children interpret grouping to be a cue to category membership for similar animals, but not for similar artifacts.

To test this hypothesis, children were shown photographs of a target object in various grouping contexts. They were then taught a label for the target object and asked to extend it to other objects. Children's label extension for animals was influenced by grouping context, whereas their label extension for artifacts was not. Thus, first graders tend to abide by the representation specificity hypothesis for artifacts, but the shared context hypothesis for animals. Ways in which these results may relate to other findings concerning children’s acquisition of categories and word meanings are discussed.