Abstract
The objective of this research was to make inquiries about the changes that three different contexts generate in the argumentative and epistemological operations used by children aged between 8 and 10 years. Thirty-six fifth grade students from two public schools in Cali, Colombia, took part in the study. The experimental design involved three contexts based on Klahr’s theory (2000) about scientific reasoning: argumentation, prediction and experimentation. The students’ argumentative performance in the three contexts was characterized by the recurrent use of operations such as affirmation and justification and by the relatively low occurrence of opposition and counter-opposition. In relation to the epistemic aspect, the students successively increased the empirical evaluations in the prediction and experimentation context, favoring the information that was obtained in the resolution of the situation in order to solve the conflicts present in the discourse. It was found that the students in the argumentative context used several variables to explain the bouncing phenomenon where construction material and presence of gas inside the objects were the most common ones. In the experimentation context there was an increase in the explanations of the phenomenon based on two simultaneous variables being weight and presence of gas, those of bigger proportions, as well as construction material and shape.

Keywords
Argumentation, argumentative context, collaborative discourse, explanations