The communication to be presented is based upon a previous study undertaken in six learning manuals used in high schools at Salvador, Bahia. In addition, this study is part of a Ph.D research being carried out by the author in the Experimental and Mathematic Teaching Sciences Doctoral Programme held at Compostela University, Spain. The topics are the arithmetic mean and its relationship with collected data.

The analytic procedures are based on previous research carried out by Godino and Batanero (2003), who describe a theoretical semiotic model for learning, starting from the theory proposed by Hjelmslev (1943), who employs the sign functions (relating expression and content) that is called “semiotic function by Eco (1983)”. Besides, they analyze the semiotic and epistemological components involved in mathematical activities, which, in turn, are related to the ontological, epistemological and psychological aspects of mathematical learning-teaching process. From such an analysis, we can find four kinds of semiotic functions through the analysis of basic and systemic meanings that serve to assess the interpretative processes presented in different mathematical situations.

This study was also aimed at analyzing students’ personal understanding, rather than taking into account the replies from the whole group (Sax, 1989). Our findings are based on the replies from a sample of students to a questionnaire, and they indicate that most students either do not master this content or simply manage to do references to arithmetic mean without a deep knowledge of the same. Likewise, based upon these findings, we propose some assessment criteria as a way to distinctly evaluate the individual students’ answers to the questionnaire in this pilot study.

REFERENCES.


