This study is based on the assumption that it’s recommendable to get to a good understanding of the functioning of a mathematics class under non-experimental conditions to lead to syllabus innovation in our educational system. On the base of the previous assumption a study was designed in order to make abstraction of a mathematics class (Olfos, 1993), that provides the primary elements for the future making of a theory on which we can build an intermediate-level mathematics teaching structure. A qualitative focus was adopted in the study of four eighth-grade primary groups. The involved-observation technique was used with an ethnographic focus on the working field. The analysis was done in an independent way in each of the four classrooms according to the procedures of the theory on the base (Strauss & Corbin, 1990), building in this form the (descriptive) models of these mathematics classes. Finally a mathematics-class global model was developed, which resulted on having its central basis in how the mathematics class is led by the subjectivity of the teacher.