

Science as an Organized Activity: What kind of professional practice are we talking about?

Analysis of the object-participant relationship at the launch of a micro-rocket with Association National Sciences, Techniques et Jeunesse Science as an organized activity can be considered as a system of action which covers a number of varied activities of diffusion of science to the public, above all, in the context of non-formal education. These activities, not part of a school curriculum, are different from it by the nature of participation constraints (Crane et al. 1994, Guichard, 1996) and the objectives they pursue. But, how these objectives are dealt with by organizers is less known. The research being presented concerns the professional practice of organizers from French associations of scientific and technical culture, with the goal of determining the issues which are addressed during the sequence of an organized activity.

In so far as the activities which are developed by the associations depend largely on activities of technical object construction, we have been particularly interested in the process of the transformation of materials into objects with a specific end. We have analyzed this process during the sequence of an organized activity which was composed of four meetings of two hours, which took place during a vacation, at which time ten children ages 9 to 11, in groups, participated in a project of the construction and launching of a micro-rocket. The entire sequence was recorded on audiotape with the help of a portable microphone worn by the organizers.

We have divided the sequence chronologically into episodes in which we have analyzed the linguistic exchanges in order to consider the interaction between participants and the object under construction. We have also analyzed the scenario of the organized activity (spatial configuration, effective protocol, effective role of participants) and the commitment strategy of the organized activity. Moreover, we have attempted to locate, through the analysis of the practice of the organized activity, the nature of the knowledge at work in this kind of activity and the process of transformation of matter into a technical object (the micro-rocket).