Claudine Larcher

Institut National de Recherche Pédagogique, Didactique des Disciplines

Theoretical Knowledge: Linguistic, Ergonomic, and Didactic Aspects of Speech in the Workplace

As a specialist in the sciences, I am interested in three different themes: the participation of the sciences in the construction of linguistic abilities, the acquisition of specific kinds of language, schemes, graphs, symbolic codes and the relationship between gesture and discourse.

As for the first point, two issues of discursive abilities can be demonstrated: the structuring of individual thought within activities of the production of writing for oneself and an aptitude for the communication of one's thoughts and the comprehension of those of others.

The research of the Institut National de Recherche Pédagogique on writing in the sciences concerns especially informal writing in the workplace. Presently, the operation "La main à la pâte" which targets the development of the sciences in grade school, emphasizes the contributions of scientific instruction to the mastery of oral and written language of young students. The distinction between fundamental learning, on the one hand, and less fundamental learning, on the other, is called into question to the benefit of a valorization of spoken and written language in situations of activity which are inscribed within the scientific disciplines.

Work on communication relates back to that done on mediation which studied the means employed by instructors in the construction of the co-signification of utterances.

Moreover, if everyday language does not always use the correct scientific vocabulary (use of the word "weight", for example) specialists also use among themselves an inadequate vocabulary which confuses, for example, the register of objects with that of their characteristics or the register of phenomena with that of a model. How does one help students acquire a vocabulary which distinguishes between different concepts, situate it in relationship to everyday language and make them into "specialists"? What assurance can one have that the same language is being spoken at the same time?

The multiplicity of information translated synthetically by schemes and graphs, in particular in biology, has resulted in, moreover, studies on the functioning of such tools and the difficulties which students encounter. Finally, the articulation between gesture and discourse relates back to situations where "demonstration" is at times considered as sufficient for communication: lab work or professional training situations where one demonstrates gesture and technique to students, but also teacher training situations. "The right words" which designate that which is relevant in gesture or an action, are not always available.