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La *Logique Naturelle* au service de la formation des enseignants : analyse d'une explication en sciences

Natural Logic for Teacher Education: Analysis of an Explanation for Science Teaching

Abstract. In this paper, I focus on two contributions of Denis Miéville, in order to stress the relevance of this early work of *Natural* Logic for ongoing research in educational research, and for the development of our understanding of logico-discursive construction. Drawing on Miéville's work on explanation and explanatory process (« démarche explicative »), a teacher's explanatory discourse in biology, recorded from his teaching practice, is analyzed with in order to describe the progressive construction of a schematization. The challenge for pupils to reconstruct the teacher's schematization is briefly addressed through Miéville's concept of knowledge threshold (« seuil de connaissance »), and leads to an analysis that stresses the multiple constraints making the teacher's discursive activity of explaning concepts particularly difficult. Moreover, the result of this short analysis shows the interest in detailed analysis of discourse for better understanding the learning processes involved in the production and audience of discourse, and the potential of Natural Logic for doing it.

Keywords: Natural Logic, logico-discursive operations, explanation, science education, teacher education