

Preschool children doing understanding an algorithm: The valuable use of Conversation Analysis (CA) to investigate children's knowledge-in-interaction.

Teachers need concrete accounts in order to monitor how children are constructing knowledge when engaged in classroom activities.

The aim of our paper is to show how a conversation analytic (CA) approach to study joint classroom activities gives (visual) access to children's knowledge-in-interaction.

In our study, we will point out how a fine-grained CA based video analysis of a situated 'algorithm' activity in a preschool classroom can shed light on how the participants (4 years old children) display constructing knowledge. By closely focusing on the children's sequentially organized participation in the 'algorithm' activity, we can grasp the children's knowledge construction as tangible and observable in their multimodally occurring interactions (talk, gaze, gesture, mobilization of artefacts, body movement). Thus, we can visualize how knowledge is locally managed by the children in the dialogic dynamics of their interactions. Furthermore, our CA driven study allows us to consider the children's engagement in the 'algorithm' activity as developing an ongoing trajectory of building knowledge.

Our paper seeks to underline that the use of CA is well suited to support and to develop teachers' reflection on children's knowledge-in-interaction during joint classroom activities. We will underline that CA based video analysis can improve teachers' understanding of what children are able to achieve. Our research approach gives indeed access to how children show to others their knowledge and their orientation to content and concepts.

Arend, B. et al. (2014). Perspectives do matter – Expanding Multimodal Interaction Analysis with Joint Screen. *Classroom Discourse, Special Issue Multimodality*, 5(1), 38-50.

Bateman, A. & Church, A. (2017). *Children's Knowledge-in-Interaction*. Singapore: Springer Science +Business Media.

Gardner, R. (2013). Conversation analysis in the classroom. In J. Sidnell & T. Stivers (Eds.), *The Handbook of Conversation Analysis* (pp. 593-611). Blackwell Publishing Ltd.

Heritage, J. (2012). Epistemics in action: Action formation and territories of knowledge. *Research on Language and Social Interaction*, 45(1), 1-29.

Mondada, L. (2011). Understanding as an embodied, situated and sequential achievement in interaction. *Journal of Pragmatics*, 43(2), 542-552.

Stahl, G. (2000). A Model of Collaborative Knowledge-Building. In B. Fishman & S. O'Connor-Divelbiss (Eds.), *Fourth International Conference of the Learning Sciences* (pp. 70-77). Mahwah, NJ: Erlbaum.