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Multimodal Interaction in Tutoring-Like Tasks for Children's Knowledge-Asymmetric Dyads

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Abstract

Children are capable of effective peer-tutoring (Calero, 2019), yet the interactional mechanisms underlying this effect remain unclear. This study examined how peer-tutoring operates by analysing the multimodal behaviours between a more knowledgeable child (MKC) and less knowledgeable child (LKC) in 7–8-year-olds dyads during a peer-tutoring-like task involving scientific reasoning about the Earth's shape. Sixteen dyads were analysed using coded speech acts, gestures and proxemic behaviours, and data applying generalized linear mixed models. Results showed no overall differences between MKC and LKC in question production. However, differences emerged in verbal interaction patterns: MKC produced significantly more directive statements (commands) than LKC, and only during the first part of the task. Differences in gestures and proxemics were no longer significant once behavioural type and task phase were included in the model. These findings suggest that peer-tutoring effects are driven by context-sensitive interactional configurations rather than stable, role-based differences in knowledge status.