

Tuning-in to non-linguistic resources during collective problem-solving in a second language context

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Drawing on the claim that the *zone of proximal development* (Vygotsky, 1978) is multi-directional (Abtahi et al., 2017), we describe collaboration between an English-medium after-school mathematics club facilitator and four Year 3 learners in solving the sharing of 24 candy-sticks equally among five people. We show how, in the course of the interaction, the “more knowledgeable other” role shifted between participants, and how, despite the children’s lack of English proficiency, the facilitator’s prompting, in combination with the children’s use of whiteboards to diagrammatically represent and share their thinking, and the physical presence of the candy-sticks, generated productive learning engagement towards the solution.

References

- Abtahi, Y., Graven, M., & Lerman, S. (2017). Conceptualising the more knowledgeable other within a multidirectional ZPD. *Educational Studies in Mathematics*, 96(3), 275-287.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Boston: Harvard College.