

“INCLUSION” AND “DISABILITY” IN THE MATHEMATICS CLASSROOM: THE CASE OF VISUALLY IMPAIRED PUPILS

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“Inclusion” and “disability” are conceptualised differently by different models in educational research (Nardi, Healy, Biza & Fernandes, 2018). Our two-phase study, consisting of an exploratory phase (Phase 1) and an experimental phase (Phase 2), examines “inclusion” and “disability” in mainstream primary mathematics classrooms with visually impaired pupils in the UK. In Phase 1, we investigate the inclusion and disability discourses of teaching staff (teachers and support staff) and how these are experienced by visually impaired pupils in the mathematics classroom. In Phase 2, we and the teaching staff will design and trial mathematics lessons that aim to address issues identified in Phase 1 in order to examine shifts in the pupil and staff perspectives on “inclusion” and “disability” and to explore benefits that may have arisen in the trials, for all pupils. In both phases, we collect data through classroom observations and interviews of teaching staff and pupils and our data analysis brings together elements of Vygotskian sociocultural theory, discourse analysis and embodied cognition (Nardi et al, *ibid.*). Here we draw on data from three primary classrooms to showcase preliminary Phase 1 findings. Our analysis suggests that “inclusion” is understood by all teaching staff as achieved when the visually impaired pupils’ needs are considered in mathematics lessons. Support staff and teachers though understand “inclusion” somewhat differently: the former see this as adaptation to the needs of individual pupils and the latter as adaptation as well as through universally designed practices. Furthermore, teachers report limited training on inclusion and we observe that the often more nuanced training offered to support staff may also be linked to institutional understandings of “inclusion” which are closer to those of special education in mainstream settings. As for “disability”, all staff consider visual impairment as a form of disability and all, but one, describe disability as socially constructed, rather than an individual’s physical limitation attributed to impairment. Their emphasis on factors which enable the visually impaired pupils to fully participate in all class activities suggests willingness by these staff to deconstruct the notion of “disability”. Sample evidence of how this enabling is enacted will come in our presentation from a lesson to Year 5 pupils on division.

References

Nardi, E., Healy, L., Biza, I., & Fernandes, S.H.A.A. (2018). ‘Feeling’ the mathematics of disabled learners: Supporting teachers towards attuning and resignifying in inclusive mathematics classrooms. In R. Hunter, M. Civil, B. Herbel-Eisenmann, N. Planas, & D. Wagner (Eds.), *Mathematical discourse that breaks barriers and creates space for marginalized learners*, (pp. 147-170). SENSE Publications.