Overcoming issues of status and creating pathways for learning mathematics in one primary school classroom

Generosa Leach

Massey University

<G.Leach@massey.ac.nz>

In this presentation, I report on the pedagogical actions of one primary school teacher to provide equitable opportunities for all students to learn mathematics. Data were collected in one New Zealand primary school mathematics classroom over a year-long investigation examining how classroom environments can be restructured and revisioned as a means of striving toward equity. Initial attempts by the teacher to create a reform-style collaborative learning environment were impeded by issues of status. Status issues arise when generalisations relating to notions of other's perceived intellectual ability, social advantage, or cultural difference are made by peers (Cohen & Lotan, 1995; Dunleavy, 2015; Featherstone et al., 2011; Shah & Crespo, 2018). These generalisations create status hierarchies, which in turn affect student engagement in learning mathematics (Cohen, 1997; Langer-Osuna, 2016). In class, four students afforded themselves high status during mathematics lessons and dominated classroom discussions. The imbalance in status impeded all students' access to learning mathematics. Through critical reflection and enactment of specific pedagogical actions, the teacher mitigated these status issues, and pathways to learning mathematics for all students were created.

References

- Cohen, E. G. (1997). Understanding status problems: Sources and consequences. In E. G. Cohen & R. A. Lotan (Eds.), *Working for equity in heterogeneous classrooms: Sociological theory in practice* (pp. vii-ix). Teachers College Press.
- Cohen, E. G., & Lotan, R. A. (1995). Producing equal-status interaction in the heterogeneous classroom. *American Educational Research Journal*, *32*, 99-120.
- Dunleavy, T. K. (2015). Delegating mathematical authority as a means to strive toward equity. *Journal of Urban Mathematics education*, 8(1), 62-82.
- Featherstone, H., Crespo, S., Jilk, L. M., Oslund, J. A., Parks, A. N., & Wood, M. B. (2011). *Smarter together! Collaboration and equity in the elementary math classroom*. National Council of Teachers of Mathematics.
- Langer-Osuna, J. M. (2016). The social construction of authority among peers and its implications for collaborative mathematics problem solving. *Mathematical Thinking and Learning*, 18(2), 107-124.
- Shah, N., & Crespo, S. (2018). Cultural narratives and status hierarchies: Tools for identifying and disrupting inequity in mathematics classroom interaction. 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. 23-37). Sense.

^{2021.} In Y. H. Leong, B. Kaur, B. H. Choy, J. B. W. Yeo, & S. L. Chin (Eds.), *Excellence in Mathematics Education: Foundations and Pathways (Proceedings of the 43rd annual conference of the Mathematics Education Research Group of Australasia)*, p. 433. Singapore: MERGA.