

“Becoming” a Researcher in Mathematics Education

Vince Geiger

*Institute for Learning Science and Teacher Education,
Australian Catholic University
<Vincent.geiger@acu.edu.au>*

As a contribution to the legacy of the Annual Clements/Foyster Lecture, this paper focuses on the theme of *becoming* a researcher in mathematics education – a fundamental endeavour for MERGA from its foundation. I use the term *becoming* in the socio-cultural sense, that is, how a person develops in their role as an active member of a community (see for example, Lave, 1988; Lave & Wenger, 1996). This participation leads to the development of identity – in my circumstance, as a mathematics education researcher. Thus, this paper takes the form of a reflection on my own development, my own *becoming*, in the sense that “people are *becoming* kinds of persons” (Lave, 1996, p. 157). This reflection is an analytical narrative of transformation from student to teacher to researcher in which I draw on the approach others have adopted in the self-study of their own development – reflecting on personal history through the lens of a theoretical framework (e.g., Krainer, 2008). Given that my formation has been influenced and supported by different communities of teachers and scholars as I stepped into and out of different practices, I adopt a socio-cultural perspective in describing and analysing the development of a person-in-practice-in-person (Lerman, 2000). Consistent with this approach, I structure my commentary on personal transformation by drawing on Valsiner’s Zone Theory (Valsiner, 1997). Through this analysis, I identify the zones of proximal development, free movement, and promoted action, that influenced my transformation at critical junctures of my career development in mathematics education.

In their research, Goos and Bennison (2019) have traced the identity trajectory of teachers in mathematics education in a manner consistent with Wenger’s (1998) notion of identity-as-becoming. In this paper, I have attempted to connect this thinking to that of researcher development in mathematics education. In doing so, I have mapped the lived experience of defining my own research program through important milestones of development and a growing sense of becoming within the MERGA, and other, research communities.

References

- Goos, M., & Bennison, A. (2019). A zone theory approach to analysing identity formation in mathematics education. *ZDM - Mathematics Education*, 51, 405–418. <https://doi.org/10.1007/s11858-018-1011-8>
- Krainer, K. (2008). Reflecting the development of a mathematics teacher educator and his discipline. In B. Jaworski & T. Wood (Eds.), *International handbook of mathematics teacher education* (Vol. 4, pp. 177–199). Rotterdam: Sense Publishers.
- Lave, J. (1988). *Cognition in practice: Mind, mathematics and culture in everyday life*. Cambridge University Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Lerman, S. (2000). The social turn in mathematics education research. In J. Boaler (Ed.), *Multiple perspectives on mathematics teaching and learning* (pp. 19–44). Ablex.
- Valsiner, J. (1997). *Culture and the development of children's action: A theory of human development*. John Wiley & Sons.
- Wenger, E. (1998). Communities of practice: Learning as a social system. *Systems thinker*, 9(5), 2–3.