

ZMATH 2016e.00404

Nardi, Elena

Where form and substance meet: using the narrative approach of re-storying to generate research findings and community rapprochement in (university) mathematics education.

Educ. Stud. Math. 92, No. 3, 361-377 (2016).

Summary: Storytelling is an engaging way through which lived experience can be shared and reflected upon, and a tool through which difference, diversity – and even conflict – can be acknowledged and elaborated upon. Narrative approaches to research bring the richness and vibrancy of storytelling into how data is collected and interpretations of it shared. In this paper, I demonstrate the potency of the narrative approach of re-storying for a certain type of university mathematics education research (non-deficit, non-prescriptive, context-specific, example-centred and mathematically focused) conducted at the interface of two communities: mathematics education and mathematics. I do so through reference to [*E. Nardi, Amongst mathematicians. Teaching and learning mathematics at university level. New York, NY: Springer (2008; ME 2010c.00054)*], a study carried out in collaboration with 20 university mathematicians from six UK mathematics departments. The study deployed re-storying to present data and analyses in the form of a dialogue between two fictional, yet entirely data-grounded, characters – M, mathematician, and RME, researcher in mathematics education. In the dialogues, the typically conflicting epistemologies – and mutual perceptions of such epistemologies – of the two communities come to the fore as do the feasibility-of, benefits-from, obstacles-in and conditions-for collaboration between these communities. First, I outline the use of narrative approaches in mathematics education research. Then, I introduce the study and its use of re-storying, illustrating this with an example: the construction of a dialogue from interview data in which the participating mathematicians discuss the potentialities and pitfalls of visualisation in university mathematics teaching. I conclude by outlining re-storying as a vehicle for community rapprochement achieved through generating and sharing research findings – the substance of research – in forms that reflect the fundamental principles and aims that underpin this research. My conclusions resonate with sociocultural constructs that view mathematics teacher education as contemporary praxis and the aforementioned inter-community discussion as taking place within a third space.

Classification: D45 D35 D20

Keywords: narrative inquiry; re-storying; dialogic format; mathematicians; university mathematics education
doi:10.1007/s10649-015-9643-x