

ABSTRACT

This study takes a particular look at mathematics teacher education communities of practice (CoPs) in order to provide rich descriptions of the CoPs and make claims about its relation/in relation to teacher preparation and particularly the preparation of pre-service teachers for teaching mathematics in multilingual classrooms. The three dimensions of communities of practice proposed by Wenger (mutual engagement, shared repertoire and joint enterprise) were used in conjunction with Mortimer and Scott's notion of meaning making as a dialogic process as a theoretical lens to gain an entry into the nature of communities of practice in pre-service mathematics teacher education classrooms. Data was collected through pre-observation interviews of 12 teacher educators at four Universities in one Province in South Africa in Phase One of the study. A methodological approach based on Wenger's CoP theory and Mortimer and Scott's dialogic process was developed and used to analyse classroom observation videos of four of these teacher educators' classroom communities of practice in two universities in Phase Two of the study. Using the privileged practices in the CoPs as points of departure and how these practices shaped and were shaped by other dynamics in the CoPs, the findings emerging from the study indicate that within the multiply layers of teacher education, there is an overarching emphasis given to the acquisition of mathematical content. Nevertheless, the communicative approaches and patterns of discourse used by the different teacher educators opened up different possibilities as far as preparing pre-service teachers for teaching (in multilingual classrooms) is concerned.

Wenger's community of practice theory has found applications in different spheres of life and in different organisational and educational settings. Its use to understand and describe mathematics pre-service classrooms is, however, still largely unexplored. A theoretical contribution that this study makes lies in the extension of Wenger's CoP theory to include dialogic processes. A methodological contribution lies in the development of an organisational language (based on Wenger's three dimensions of CoP) to characterise pre-service teacher education classrooms.