Teachers' use of language in teaching mathematics in basic schools in Cape Coast, Ghana - Abstract

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Ghana's language policy in education stipulates that pupils at the upper primary level (classes 4 - 6) should be taught mathematics and all other subjects using English as the medium of instruction. Mathematics is generally seen as a difficult subject and how this subject is communicated to pupils will to a large extent influence how pupils learn the subject. Earlier researches on English and mathematics have either correlated English test scores and Mathematics test scores or examined students' performance in word problems. Research which has sought to explore how language is used in the mathematics classrooms has been done with bilingual students in places where students are exposed to English outside the school compound. There is however a dearth of research in communities where pupils rarely encounter English and how teachers cope with this situation. It is against this background that my research set out to go into primary classes 4 and 6 in two schools (one private and one public) to see what goes on there aimed at better understanding the dynamics of the mathematics classroom. This aim, I believe will best be achieved using ethnographic research. Ethnography as a qualitative research methodology is grounded in Interpretivism and draws on constructionist epistemology. Ethnography involves joining a group, usually for an extended period of time, watching what they do, recording what goes on and asking questions, continuously reflecting and analyzing what you record and writing it all up. Thus participant observation with interviews and informal conversations are the main data collection strategies that will be employed. Data gathered will be analysed to ascertain the nature of interaction, what prompts teachers' and pupils' choice of language, the roles of English and the local language in the mathematics classroom and also the linguistic challenges that teachers and pupils face in the mathematics classroom.

I will bear in mind debates with regard to access, time spent on the field and how to strike a balance in representing the voices in the field and the voices in the academy.