

# A NEWLY-QUALIFIED TEACHER'S RESPONSIBILITY FOR MATHEMATICS TEACHING

Leo Rogers, Barbara Georgiadou-Kabouridis  
University of Surrey Roehampton, UK

Pehkonen (2001) in her research on teachers' difficulties in changing their teaching practices which were textbook based, found that teachers were committed to "do their job properly" and for this they were respected by their colleagues, principal and parents. They therefore did not see a need to change their practice. Cooney (1999) argued that teachers' knowledge and beliefs are fused with their sense of purpose as teachers and their sense of responsibility given the community in which they teach.

The aim of this paper is to explore the extent to which a teacher's perception of responsibility for his pupils' learning guides his views, actions and decisions in the mathematics classroom through the case study of a newly qualified primary teacher of Y6 (11 to 12 years old) in Greece. The interaction between the school environmental constraints, like parents and the principal, and the development of the teacher's sense of responsibility was also considered.

Data came from the teacher's participation in the research project that one of the authors undertook in the school where the teacher worked. It comprised semi-structured interviews and discussions with the teacher regarding his mathematical background, his teaching planning and its implementation. Observation notes of the teacher working in his classroom, and transcripts of a video-recorded experimental teaching session were also used.

The analysis revealed that the teacher based his teaching mostly on the pupils' textbook, provided free by the Ministry of Education, and which determines the National mathematics curriculum. He used material in a demonstrative way, at times when, and in the way that it was proposed by the textbook, and he organized his lessons from a teacher-centered perspective. His perception of his responsibility for pupils' learning led him to adopt the described approaches in order to find time for revision that he considered valuable for dealing with his pupils' difficulties with certain mathematical concepts and algorithms. These views were challenged when he participated in the research project. He subsequently attempted to change his teaching practice and engaged his pupils in sharing with him the responsibility of learning. However, by basing assessment of pupils' learning on short-term outcomes he considered that his intervention was not successful. He returned to his familiar method of repetition but had become dissatisfied with his practice.

## References:

- Cooney, T.J. (1999). Conceptualising teachers' ways of knowing. *Educational Studies of Mathematics*, 38, 163-187
- Pehkonen, L. (2001). The matter of change-Being respectable. In M. van den Heuvel-Panhuizen (Ed.) *Proceeding of the 25<sup>th</sup> Conference of the International Group for the Psychology of Mathematics Education*, Utrecht University, The Netherlands, v.1, p.356