

“Quaderni di Ricerca in Didattica (Matematica)”, Supplemento n.4 al n. 19, 2009.
G.R.I.M. (Department of Mathematics, University of Palermo, Italy)

PERSONAL REFLECTIONS ABOUT RESEARCH ON CLASSROOM PRACTICE

Hélia Oliveira
Instituto de Educação
Universidade de Lisboa, Portugal
hmoliveira@fc.ul.pt

My experience in classroom observation, with research purposes, begun with great concern on its possible side effects due to a critical incident I heard about. There was a researcher who exhibited some video images, from observations made in one classroom, in research seminars for researchers. The teacher of that class came to know about that and became quite angry, and did not want the researcher to continue to use those images in public. Meanwhile I had watched that video, where we could see the students in activity, and I could not understand why the teacher was so displeased with that. For me it was just a couple of kids working in one mathematics classroom. Besides the ethical side of this issue, for which we must be very careful and strict, this incident led me to think what I needed to consider when doing research in someone-else class. How do different people interpret and value the actions that take place in the classroom? Why do not teachers sometimes see the same things as the researcher does, or best, why do they value things so differently? These different perspectives are inescapable, therefore we need to consider the possible effects of our work that draws upon other people private spaces and professionalism. This episode has marked by stance to research and, particularly, the one that takes place in the classroom. This is the first idea I want to stress: the moral responsibility for the research in the classroom.

The second idea I want to discuss is the motif for doing research in the classroom. In the field of teacher education, the classroom is linked with the practice, the natural site for teaching. The classroom is also a place for learning: for the student, the teacher, and the researcher. Research in the classroom give us the chance of gaining deeper knowledge of that site, looking at what takes place there, through the lenses of the theory and being methodologically oriented. How learning takes place? What learning is taking place? How can we describe and interpret the teaching that is promoting that kind of learning? These are questions that motivate to investigation those who continue to believe that school is a place for learning, but also recognize that teaching is a social activity that it is affected by the transformations that occur in society. It is a demanding and contextualized activity. The differences between cultures is quite evident in this volume, where teachers with diverse backgrounds show distinct practices and beliefs.

“Quaderni di Ricerca in Didattica (Matematica)”, *Supplemento n.4 al n. 19, 2009.*
G.R.I.M. (Department of Mathematics, University of Palermo, Italy)

The enormous complexity of the learning phenomena requires that we use all the possible (and of course, legitimate) means to understand it: observe, interview, look at students' written work, as well as at what they say. This is my third point. It is also important that we listen to a variety of persons involved, with different perspectives. Research that develops inside of the interpretative paradigm, intends to understand the meaning people attribute to their actions. Therefore it is very important for me as a researcher to take the teacher's view into account, to hear the teacher's voice, namely by stimulating their narratives about their practices.

My fourth remark focus on the nature of the teaching enterprise: the pedagogical encounter. Inside the teacher, there is a sense of responsibility for each student that goes beyond promoting the success in the subject. The mathematics teacher is also an educator, someone that cares for each of his/her students, but that can be done in different ways. This sense of responsibility develops as the teacher becomes attentive to the other and tries to understand it. This stance, that can be defined as vulnerability, according to Kelchtermans (2005), constitutes the true possibility for educating, for making the difference in the life of the students. The challenge for the researcher in mathematics education is to conceal her/his research agenda, one that is guided by specific issues in that domain, with a sensibility to that pedagogical encounter and the aforementioned sense of responsibility.

My fifth question concerns also the nature of the profession, specifically the way we conceive the teacher's knowledge and its relation with the theory. Much has been written about the teacher's knowledge (Ponte and Chapman, 2008; Sowder, 2007), but concerning the research on the classroom practice I want to stress the importance of considering that as craft knowledge, which emerges from the daily practice. Specially, when the teacher has the opportunity to work with the same class during a period of years, he/she gains a deep knowledge of how students will accept and react to different kind of proposals in the mathematics classroom. This is also a very promising field to research: to gain access to those practices and to document and interpret it.

Finally, I want to come back to our responsibility as researchers who are interested in the classroom practice, since the product of our work is having some influence on the educational systems in different countries. As I mentioned in my paper in this volume, the teacher's role can increase in complexity when some curricular changes are proposed and implemented in the classroom. The research on teachers' practices in those scenarios might help those responsible for the implementation of the reforms to reflect on this and to promote the adequate plans to help the teachers. Concerning the impact of the reform in mathematics curriculum, observing the students' activity in the classroom and interpreting it will, also, constitute an important contribution from the research in mathematics education. Therefore, for me, it is quite clear that re-

“Quaderni di Ricerca in Didattica (Matematica)”, *Supplemento n.4 al n. 19*, 2009.
G.R.I.M. (Department of Mathematics, University of Palermo, Italy)

search on classroom practice is the natural field for us as mathematics educators and researchers.

References

- Kelchtermans, G. (2005). Teachers' emotions in educational reforms: Self-understanding, vulnerable commitment and micropolitical literacy. *Teaching and Teacher Education*, *21*, 995-1006.
- Ponte, J. P., & Chapman, O. (2008). Preservice mathematics teachers' knowledge and development. In L. English (Ed.), *Handbook of international research in mathematics education* (2nd ed.). (pp. 223-261). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sowder, J. T. (2007). The mathematical education and development of teachers. In F. K. Lester, Jr. (Ed.), *Second handbook of research on mathematics teaching and learning* (pp. 157-223). Charlotte, NC: Information Age Publishing & National Council of Teachers of Mathematics.