Negotiating mathematics teaching? A study of a mathematics teacher's agency in collegial collaboration

Anna Pansell

Stockholm University

Introduction

The context of this short presentation is case study of one teacher, Mary, focused on understanding the complexity of mathematics teaching. The setting for this paper is a meeting between Mary and two other teachers teaching the same children mathematics. The analysis shows how Mary negotiates her role as a teacher of mathematics teaching when meeting with her colleagues.

For various reasons, professional, institutional and social, mathematics teachers may experience challenges to their own image of school mathematics that conflict with their priorities (Skott, 2001). For the last fifteen years, Sweden has had a decentralised curriculum that has forced autonomy on teachers. This forced autonomy has not only moved teachers to the centre stage of curriculum enactment (Skott, 2004), but placed them in a struggle to renegotiate the relationship between what Bernstein (2000) has described as the pedagogic recontextualising field and the official recontextualising field. The manner in which this renegotiation plays out can be seen in the ways in which teachers' exhibit agency (Emirbayer & Mische). Actions reflecting notions of agency may facilitate analyses of teacher's collegial negotiations of mathematics teaching.

Methods

In order to capture mathematics teachers' collaborative discussions, audio recordings were made of meetings in a teacher group of three. The recordings were transcribed and analyses focused on Mary's agency-related behaviours were undertaken, the results of which are summarised below.

Mary in a discussion of mathematics teaching with two colleagues

Mary is a primary school mathematics teacher, she has been teaching mathematics for approximately ten years. She is a member of a teacher group teaching the same grade that meets weekly to discuss their mathematics teaching. The analyses indicated that Mary has three main ways of action; giving consent, negotiating and posing proposals. Each is discussed in relation to a short excerpt drawn from a discussion on the development of a mark scheme and on how to move forward after the test.

Tomas: Here you get some points for free, it is easy to get three points here at "Write two thousand fifty"

Mary: Yes

Mary seems to agree, seeming to choose not to prolong this particular discussion. This could be interpreted as Mary taking no agency, it could also be Mary taking active agency choosing to agree. In the following excerpt Mary takes active agency protesting.

Tomas: If they answered completely correct it is hard to deduct points, for what reason shall I deduct the point?

Mary: But I have argued that to get full marks you have to make me understand how you thought, that's how I did it

When the discussion threatens to challenge her perspectives on good teaching she protests, argues and wins the negotiation. In the transcript these occasions are few, Mary either chooses her battles carefully or she is very much in line with her colleagues' views. In this final excerpt Mary presents a proposal.

Mary: Are we just going to hurry on now, because there is so much we could do with the theme connected to each chapter, there is so much we could do with the problem solving part.

Here Mary actively initiates a discussion. On few occasions in the transcript she is the first one to speak on a topic, but when she initiates rather than reacts, her perspectives on mathematics and, I argue, her agency become visible.

Conclusions

These excerpts highlight how Mary exhibits agency during a collaborative teacher meeting. I see such meetings as a site where teachers renegotiate the relationship between the pedagogic recontextualising field and the official recontextualising field (Bernstein, 2000). In closing, it seems to me that the juxtaposition of agency and Bernstein's (2000) recontextualisations may help capture the essence of why mathematics teachers teach the way they do.

References

Bernstein, B. (2000). *Pedagogy, symbolic control and identity*. Maryland: Rowman& Littlefield.

Emirbayer, M., & Mische, A. (1998). What is agency?*American Journal of Sociology*, *103*(4), 962-1023.

Skott, J. (2001). The emerging practices of a novice teacher: The roles of his school mathematics images. *Journal of Mathematics Teacher Education*, 4(1), 3-28. doi:10.1023/A:1009978831627

Skott, J. (2004). The forced autonomy of mathematics teachers. *Educational Studies in Mathematics*, 55(1-3), 227-257.