

The Discourse of Teacher Training, a Possible Way of Analysis

Andreas Ebbelind
Linnaeus University

Introduction

Traditional research regarding identity has focused on the individual (Phillips, 2007); however, in later years, there has been increased focus on the social setting (Skott, 2009). According to Morgan (2006), social perspectives on identity provide us with more and specifically different information about developing an identity.

The present study adopts a qualitative approach, researching four to six prospective teachers (primary school teachers, years 4 – 6) and follows them before, during and after courses, lectures, seminars, internships, study groups, examination work and so on. The empirical data collected during the project comes from interviews with voice/video recording, observation with field notes, written examinations in the subject of mathematics education, etc. The intention is to study both the affordance and the prospective teachers' agency during the process of developing a teacher identity within teacher training. Affordance is defined as the actions that someone potentially can perform within a teaching situation (Van Leeuwen, 2005). Agency is about the ability to make choices and act upon them within the teaching situation (Kress, 2010). When considering the possibilities of researching teacher identity within teacher training, two different perspectives, which are in a symbiotic relation, are proposed. The first perspective concerns the prospective teacher and the second concerns teacher training with all of its different resources.

The aim of the present paper is to introduce the social semiotic perspective of System Functional Linguistics (SFL) as a theoretical perspective for studying and analyzing prospective teachers' identity development. Making analyses in this manner (SFL) is a way of being critical to the discourse and is a part of Critical Discourse Analysis (Chouliaraki & Fairclough, 1999). Data from one case study interview will be presented.

Social semiotics, identity and SFL

According to Morgan (2006), there is a growing interest from the field of mathematics education in semiotics. Semiotics is about the systematic study of signs. A researcher can assume different perspectives on semiotics, the pure intention of the sign, the cultural interpretation of the sign and the social interpretation of the sign. The latter perspective, which fits with SFL, highlights interaction and communication. Social semiotics is not a

theory (Van Leeuwen, 2005) and needs to be applied to another field of interest, in this case, mathematics education.

Identity, according to social semiotics, is multiple and dynamic. Morgan (2010) highlights that it is not monolithic as described in traditional research about beliefs. When prospective teachers engage in communication about teaching and learning mathematics or engage in semiotic production provided by the mathematic educators, the outcome is a result of the enhancement of their capacity to act as a mathematics teacher. When learning, the capacity is at the same time a change in identity. In this way, identity and knowledge are linked together. Kress (2010) defines identity “*as the outcome of constant transformative engagement by someone with 'the world', with a resultant enhancement of their capacities for acting in the world*” (p. 174).

SFL draws upon the notion that a text is not something predefined, rather, it is something that will be constructed in interaction with others. A text is always placed within a discourse and is a form of social exchange between objects. Analyzing the discourse is a way of structuring the place where the exchanges of meaning happen. The educational setting and the activity that the participants take part in are described as the field. How the participants are engaged and the relationship they have is called the tenor. Finally, the different modes used in the communication are highlighted. However this is not enough. One also needs to examine the communicative exchange itself – the text. The communicative exchange is structured according to how a text functions in communication. SFL regards a text as being handled in three different processes, so called meta-functions, simultaneously. Ideation, “the construction of reality” concerns statements that address the interpretation of oneself in different discourses, how one is intending to realize the discourse. Interpersonal, “the enactment and negotiation of social relations and identities” is about how the participants are engaged in modalities. Textual function, “the construction of text” is the realization of mode in the discourse (Chouliaraki & Fairclough, 1999).

References

- Chouliaraki, L., & Fairclough, N. (1999). *Discourse in late modernity: rethinking critical discourse analysis*. Edinburgh: Edinburgh Univ. Press.
- Kress, G. R. (2010). *Multimodality: a social semiotic approach to contemporary communication*. London: Routledge.
- Morgan, C. (2006). What does social semiotics have to offer mathematics education research? *Educational Studies in Mathematics*, 61(1), 219-245.
- Morgan, C. (2010). Making sense of curriculum innovation and mathematics teacher identity. In C. Kanes (Ed.), *Elaborating professionalism: Studies in practice and theory* (pp. 107-122). Dordrecht: Springer.
- Phillip, A. R. (2007). Mathematics teachers' beliefs and affect. In F. K. Lester (Ed.), *Second handbook of research on mathematics teaching and learning* (pp. 257-318). Reston: National Council of Teachers of Mathematics.
- Van Leeuwen, T. (2005). *Introducing social semiotics*. London: Routledge.
- Skott, J. (2009). Contextualising the notion of 'belief enactment'. *Journal of Mathematics Teacher Education*, 12(1), 27-46.