Abstract
One of the most important aims of schooling is to give all children an equal education. Despite this, social differences continue to be reproduced and earlier studies show that there is a relationship between low socioeconomic background of students and low achievement in science education. Building upon sociological frameworks (foremost Bourdieu and Bernstein) the overall aim of this thesis was to contribute to a more complex description and analysis of inequalities in education, focusing on social class in the science classroom. Inspired by an ethnographic approach, the data was produced in a Swedish compulsory school. The students, aged fourteen and fifteen, were followed during a five week unit on physics. Firstly, descriptions and analyses revealed that the knowledge threshold in the classroom was lowered. This was done in hidden negotiations between the students, the teacher, the sociohistorical legacy of science education, and a social discourse. It created a knowledge threshold which was altered not only for students from lower classes but for all the students in the classroom. Secondly, the communication showed that being able to translate, interpret and adapt to new or changed ways of talking increased the possibilities of understanding what ways of talking and acting that were valid or not. Ways of talking were created and influenced in an intricate interplay between the practices in the classroom, the teacher, and the students often in hidden negotiations. Together they constructed what ways of talking that was valued. For example, in strongly controlled dialogues, more students could be heard and evaluated. However, it became a type of communication based on the lowest common denominator that in the long term might exclude all students. Thirdly, laboratory work lessons could be filled with curiosity and exciting challenges. However, the regulative discourse totally overrode the instructional discourse and became decisive. In addition, laboratory work in this classroom was a social process that needed and was expected to be performed in groups. This became problematic since the grades were awarded to individuals. Moreover, the reactions and the effects of a hierarchical class-marking group process became decisive. The groups became to some extent safe havens for the students, on the other hand, undermined their chances in the classroom. Science learning and teaching in this classroom was a social process and could not be correlated to, for example, inborn facilities per se nor to certain agents in the field. Social class was manifested in the science class, for instance in the dialogues or in laboratory work always performed in groups. Social class must be understood as collective processes and in relationship with, for example, the value that science is ascribed.

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