

Institutionen för pedagogik och specialpedagogik

# Takt och hållning

- en relationell studie om *det oberäkneliga*  
i matematikundervisningen

av

Ann-Louise Ljungblad

## AKADEMISK AVHANDLING

som med tillstånd av utbildningsvetenskapliga fakulteten vid  
Göteborgs universitet för vinnande av doktorsexamen i  
pedagogik framläggs till offentlig granskning

---

Fredagen den 5 februari 2016, kl. 13.00  
Göteborgs universitet, Pedagogiken, Kjell Härnqvistsalen

Fakultetsponent: Professor Rune Hausstätter, Högskolan i  
Lillehammer



GÖTEBORGS UNIVERSITET  
ACTA UNIVERSITATIS GOTHOBURGENSIS

## Abstract

Title: Tact and stance – a relational study about *the incalculable* in mathematics teaching  
Author: Ann-Louise Ljungblad  
Language: Swedish with an English summary  
ISBN: 978-91-7346-859-6 (tryckt)  
ISBN: 978-91-7346-860-2 (pdf)  
ISSN: 0436-1121  
Keywords: teacher-student relationship, pedagogical tact, stance, relational creating of meaning, inclusion, microethnography

This microethnographic classroom study takes its point of departure in *the Convention on the Rights of the Child*. It examines opportunities and obstacles for children to participate in democratic educational relationships, which in this context refers to the emergence of the students' selves as unique persons. The microethnography explores how the teacher-student relationship is embodied in teaching, in communicational flow as well as when communicational dilemmas arise. Through a relational turn an increased understanding of situated teaching is being sought, by exploring interpersonal educational relationships. Four mathematics teachers and 100 students from compulsory and upper secondary schools and schools for children with learning disabilities have participated.

Video-documentary methods have been used to closely follow and record the teachers in the teaching situation. A meaning-making dialogue was constructed afterwards where the teachers had the opportunity to view the recorded video sequences, and to articulate their interpersonal communication. The aim, from a relational perspective, is to provide extended understanding and knowledge of the teachers' acknowledgement to students in situated teaching. The classroom study shows empirically how teachers relate to students and contributes to knowledge within the relational field, of value for both student teachers and teachers in practice. The study contributes to the field of inclusion by empirically exploring what Biesta describes as *the incalculable*.

Teachers' acknowledgement to students is explored by micro-analysis when, in a relational creating of meaning, the teachers search for *Who* the student is. The teachers create pedagogical meetings that embody a curiosity for unique children. The result highlights a moment of particular importance; at that second, when the new and incalculable emerges in the teaching moment, the teacher refrains from assessment, and listens and creates a space for the student to speak with her or his unique voice. In line with Lövlie's *tact* the momentary teacher's glance, tone of voice and gestures emerge as a sensuous aesthetic improvisation. The teacher's pedagogical tact when meeting unique children can be understood as an *incalculable tact*, which cannot be planned. A pedagogical art form becomes visible as a creative process in teaching and reveals how the teacher's pedagogical tact and tactfulness can create a space for the emergence of the student's self. Hence, the teacher's pedagogical tact can meet *the incalculable* and is of great importance in mathematics teaching. The study also provides an understanding that there are no relational differences between teachers' pedagogical tact in relation to students' different ages, different levels or different types of schooling.

By highlighting existential dimensions, of what co-existence and co-operation as a teacher imply relationally, the microethnography brings out an essential pedagogical dimension for all teachers. The results further show the importance of respectful and trusting teacher-student relationships. The teachers have an open and tolerant pedagogical stance, where what the students bring forth that is new is embraced and can pass into the dialogue. Hence, in the maintaining of a teacher-student relationship a constant tactful act of balance is required from the teacher, in each situation. In the moment, *a responsible stance* appears where the teacher takes responsibility for both teaching and for their relationship to the student. Thus, students do not end up carriers of the difficulties of teaching. The study points toward *the incalculable* as a relational alternative, an unfinished process that teachers must live each day – a lived ethic. In accordance with *the Convention on the Rights of the Child*, the results of this study indicate a pedagogical responsible stance providing unique children opportunities to participate in democratic educational relationships.