IGNITE **Research** Institute **Keeping Order** in a Thinking and Learning Environment TA, Teachers Approach Conference, 2016, Riga, Latvia 2014-09-23--24

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The larger study

- A How does education meet the demands for cognitive development in schools, afterschools and preschools?
- A How does the teachers' ways to plan and carry out activities change after having participated in development programs, and what development methods seem to be more effective?
- Observations and interviews:
 - 65 lessons in classrooms grade K-12
 - a 30 sessions of afterschool activities
 - 40 sessions of preschool activities
 - a 82 sessions during development programs.

In this part-study

- A How is the teacher's way of keeping order related to the cognitive learning outcome in classroom, afterschool, and preschool teaching?
- A How is (if at all) the way of keeping order related to the teaching environment and praxis theory of the teacher?
- All observations and interviews were used
- Analyzed by Bloom's revised taxonomy using Eisner's phenomenological approach 'educational connoisseurship and criticism*

Previous research

- Scarce Swedish research on keeping order in the classroom
- Good order doesn't automatically lead to high cognition
- The National Inspectorate:
 - Not much troublemaking or disturbances BUT not much learning and thinking
 - The teacher is the key factor to order
 - Teacher corrections are often gentle, vague and unclear
 - A High connection between orderliness, clear lesson structure, and teacher's leadership

Five different teaching environment identified

- The common teaching environment
- The student investigative teaching environment
- The scaffolding teaching environment
- The 'moralistic' teaching environment
- The 'laissez-faire' teaching environment

Bloom's revised taxonomy

Anderson & Krathwohl, 2001

THE KNOWLEDGE DIMENSION	THE COGNITIVE PROCESS DIMENSION					
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create
A. Factual knowledge						
B. Conceptual knowledge						
C. Procedural knowledge						
D. Meta-cognitive knowledge						

The common teaching environment

- Start with the teacher introducing
- The teacher presents new knowledge
- Class practice and teacher corrects
- Teacher summarize and give homework

THE KNOWLEDGE DIMENSION	THE COGNITIVE PROCESS DIMENSION						
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create	
A. Factual knowledge							
B. Conceptual knowledge							
C. Procedural knowledge							
D. Meta-cognitive knowledge							

The child investigative teaching environment

- Common in several activities in preschool and some in school
- Introducing new material that will help the students to develop
 - The students explore their own areas of interest in whatever way they choose



THE KNOWLEDGE DIMENSION	THE COGNITIVE PROCESS DIMENSION						
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create	
A. Factual knowledge							
B. Conceptual knowledge							
C. Procedural knowledge							
D. Meta-cognitive knowledge							

The 'moralistic' teaching environment

The teacher seemed occupied with something else

teaching the students how to behave?

THE KNOWLEDGE DIMENSION	THE COGNITIVE PROCESS DIMENSION					
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create
A. Factual knowledge						
B. Conceptual knowledge						
C. Procedural knowledge						
D. Meta-cognitive knowledge						

The 'laissez-faire' teaching environment

- Observed in afterschools, not in classrooms
- Staff seems to lack pedagogical intentions or goals
- Activities lack knowledge or cognitive content
- Decisions and activities are left to the students, and the students use most of the talk time

THE KNOWLEDGE DIMENSION	THE COGNITIVE PROCESS DIMENSION					
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create
A. Factual knowledge						
B. Conceptual knowledge						
C. Procedural knowledge						
D. Meta-cognitive knowledge						

The scaffolding teaching environment

- Puzzlement, perplexity and challenge
- Analysis:
 - What did we find out? What did we learn?
 - What do we want to learn/understand now?
 - Thinking tools and strategies
- New knowledge
- Generalization and transfer
- Evaluate



THE KNOWLEDGE DIMENSION	THE COGNITIVE PROCESS DIMENSION						
	1. Remember	2. Understand	3. Apply	4. Analyze	5. Evaluate	6. Create	
A. Factual knowledge							
B. Conceptual knowledge							
C. Procedural knowledge							
D. Meta-cognitive knowledge							

Three patterns

- Social safety and cognitive challenge
- Social and cognitive safety
- Disorder and uncertainty



Vague system

Perceptible system

Other conclusions

- The teacher is not always consistent in creating teaching environments but is so surprisingly often
- Will good order lead to higher cognitive learning?
 - The causality seems opposite: Where there is high cognition, there is order
- Social safety and cognitive challenge
- Few role models of democratic classrooms
- As principal put some effort on teachers in square 1 and 2

Papers can be found at

www.igniteresearch.org

- Pihlgren, A. S. (2013). Planning for Thinking and Cognitive Development of Students.
- Pihlgren, A. S. (2014). Complementary Education in Classrooms and Afterschools.
- Pihlgren, A. S. (2015). Enhancing Teachers' Understanding of How to Develop Students' Thinking.
- Pihlgren, A. S. (2016). Teaching Environments in Preschool Teaching.
- Pihlgren, A. S. (2016). Keeping Order in a Thinking and Learning Environment.