

Teacher Quality, Instructional Quality, and Student Outcomes

-across cohorts, time and countries

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**Rationale ,Theoretical framework,
findings, discussion**

Rationale

The quality of teachers + their instruction =
key determinants to student outcome



Previous research: single country studies, western
countries, cross-sectional.

The complex educational context and its dynamics over
time are rarely accounted for

(Klieme et al., 2009; Seidel & Shavelson, 2007; Pianta & Hamre, 2009; Kane & Cantrell, 2012; Creemers and Kyriakides, 2008; Goe, 2007; Baumert et al., 2010; Wayne & Youngs, 2003; Boyd et al., 2009; Hill et al., 2005; Clotfelter et al., 2007; Kee, 2012; Goldsmith et al., 2014; Desimone et al., 2011; Fauth et al., 2014)

Need to take into account:

1. the complexity of educational systems with many hierarchical levels and interwoven relationships
2. the complexity of relationships within and between each level with direct and indirect effects
3. the variation of these relationships across countries
4. their development over time.

International Large Scale Assessment

ILSA data provide the opportunity for:

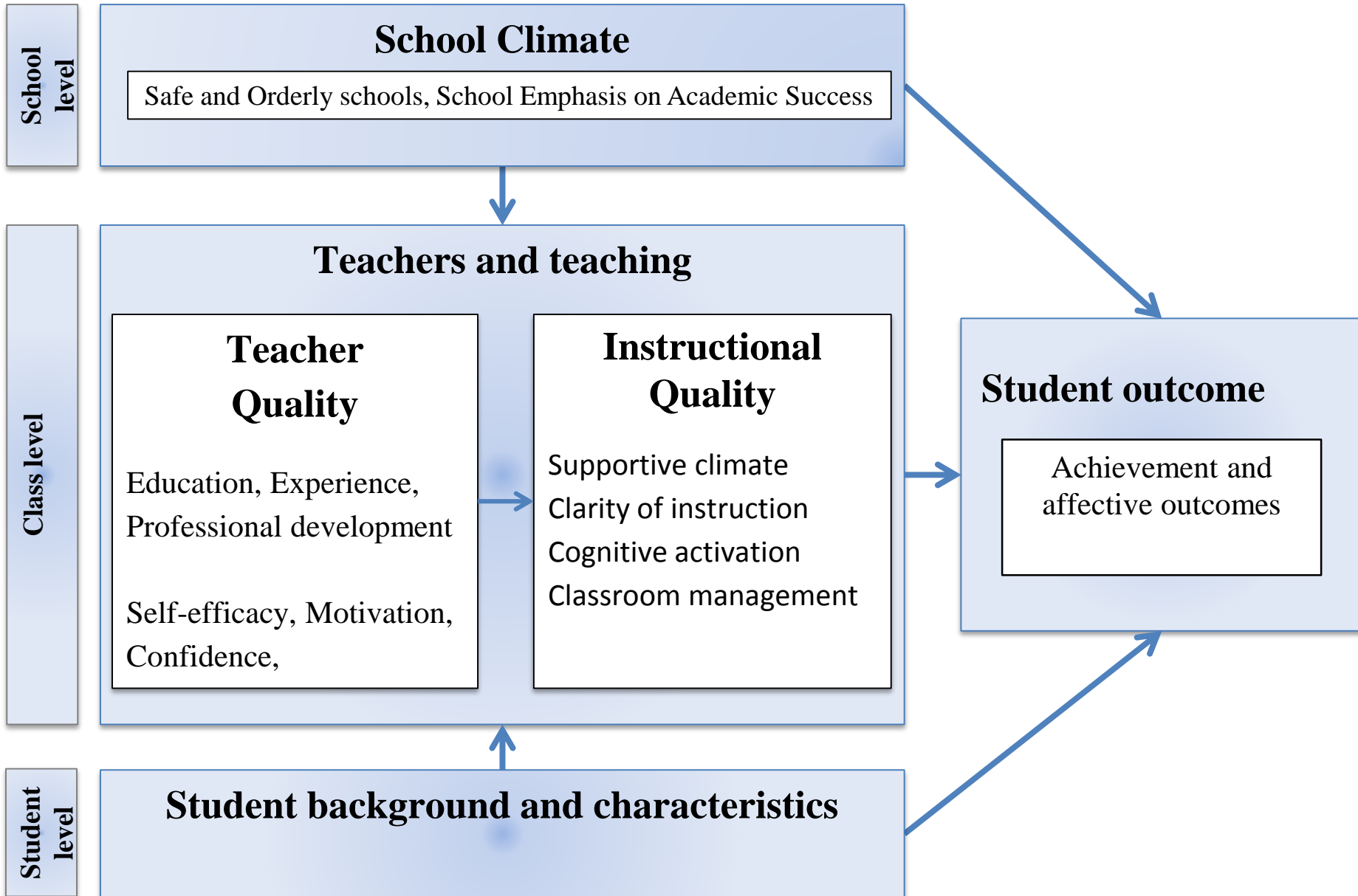
- multi-level analysis
- trend design
- representative samples

TIMSS : data on the class level

- explore relations across cohorts, time and countries from all continents.

Overarching Research Question

What are the relations between **teacher quality**, **instructional quality** and **student outcome**
-when taking the educational context (i.e. school climate and student characteristics) and its dynamics into account?



Chapter 4

School climate, teacher quality and achievement.

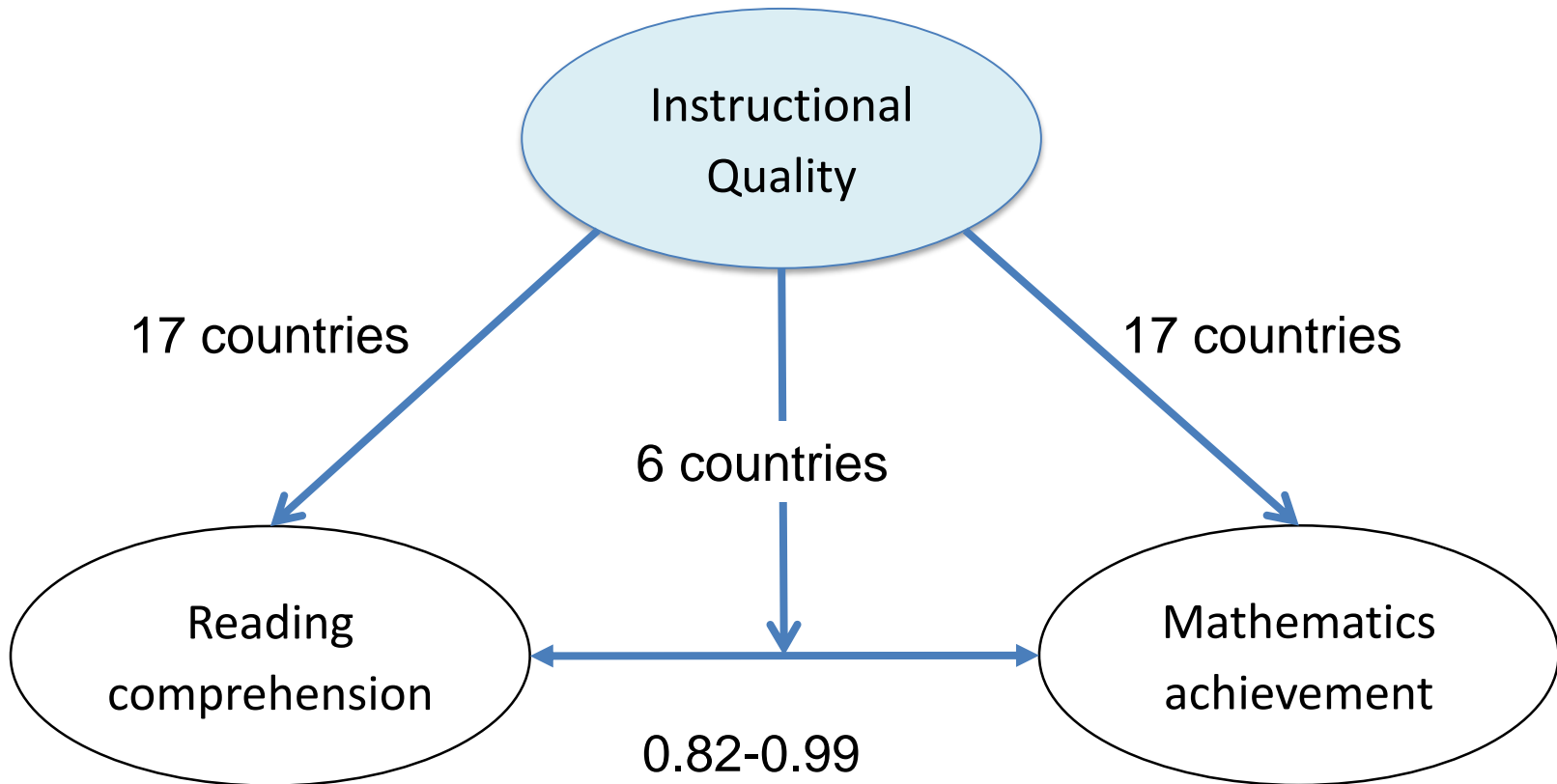
(Gustafsson & Nilsen)

- Longitudinal approach: 2007-2011
- Teachers' attained level of education → achievement
- Professional development → achievement
- Insignificant: Teacher self-efficacy (preparedness), experience and major academic discipline studied
- School emphasis on academic success (parts of it) → achievement

Chapter 5

Instructional quality, reading and math achievement

(Nordtvedt, Gustafsson, Lehre)



Chapter 6

Instructional quality and bullying victimization

(Rutkowski & Rutkowski)

International model: higher instructional quality was associated with lower rates of bullying.

Educational-system level: significant in 21 countries of 48

Girls and students who were more attached to their school: fewer incidences of bullying victimization.

Discussion

- Our findings supports and strengthen previous studies, but:
- Heterogeneous samples, large cultural differences and difference between educational systems, especially in grade 8. → cluster analysis and multi-group approach
- Narrow measures of instructional quality (few items), new scale national option 10 countries (ECER 2016, IRC 2017)
- SEAS: better measures in TIMSS 2015, multi-dimensional
- Longitudinal approach at the country level?

Questions

- Would it be possible to provide the teacher questionnaire to only one teacher per class?
- Include instructional quality?
 - strong theory
 - e.g. classroom management (TIMSS measure teachers reports about students in their school)
- Proxy to prior achievement: grades?

Thank you!

