– The School for the Future

The EIPPEE Conference May 14-15. 2014, Oslo

The future of schooling

- Structure for the introduction
  - The mandate
  - The challenge
  - Some findings
  - Premises and concepts
  - Configuration of findings
  - Questions for discussion

The future…. of schooling

- Mandat
  - **Part 1**
  - the historical development in the subjects within the primary and secondary school
  - the subjects of the primary and secondary school in relation to naturally comparable countries
  - reports and recommendations from national and international stakeholders being relevant for the primary and secondary school connected to future requests for competence (21-century skills, key competences…).

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- Mandate
  - Part 2
  - to what extent the contents of the subjects covers the competences and the basic skills needed in a future society and working life
  - what changes to be made if these competences and skills to a larger extent should characterize the contents of the training,
  - if today`s structure of subjects should continue to form the basis, or if the contents in the training should be structured in other manners and,
  - if the contents in the subjects clause for the primary and secondary school to a sufficient degree is reflected in the contents of the training.

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- Global drivers for change (in Norway)
  - Subjects need to be redesigned
  - Scientific knowledge expanding
  - Changes in the population
  - Changes in patterns of immigration
  - Technologies
  - Advanced competences in HE and work life (social, cognitive and emotional)
  - Globalization and individualization

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- Subjects need to be redesigned
  - What to take out?
  - Deep analysis of every subjects
  - Reconstruct subjects based on studies and future challenges

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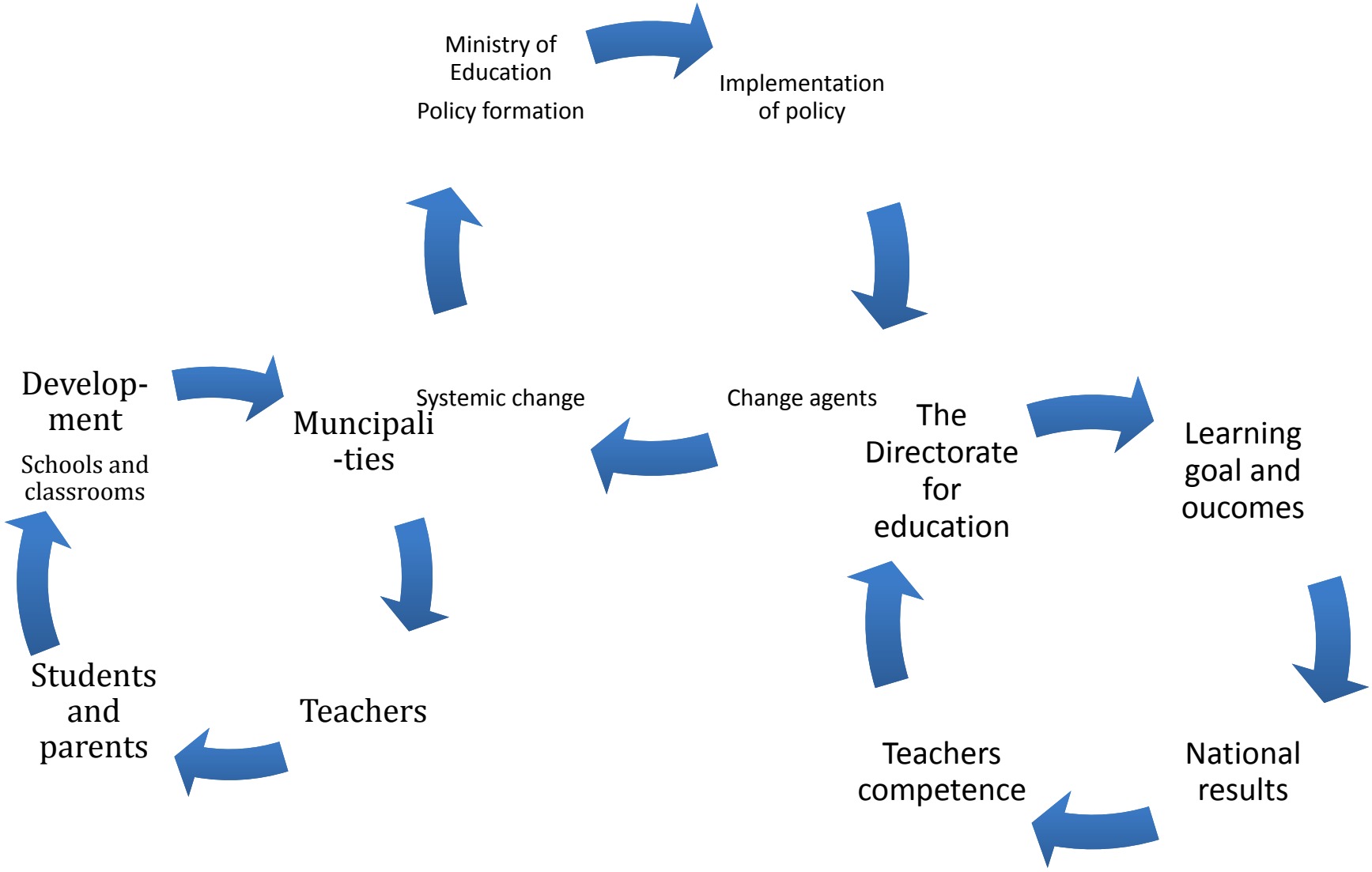
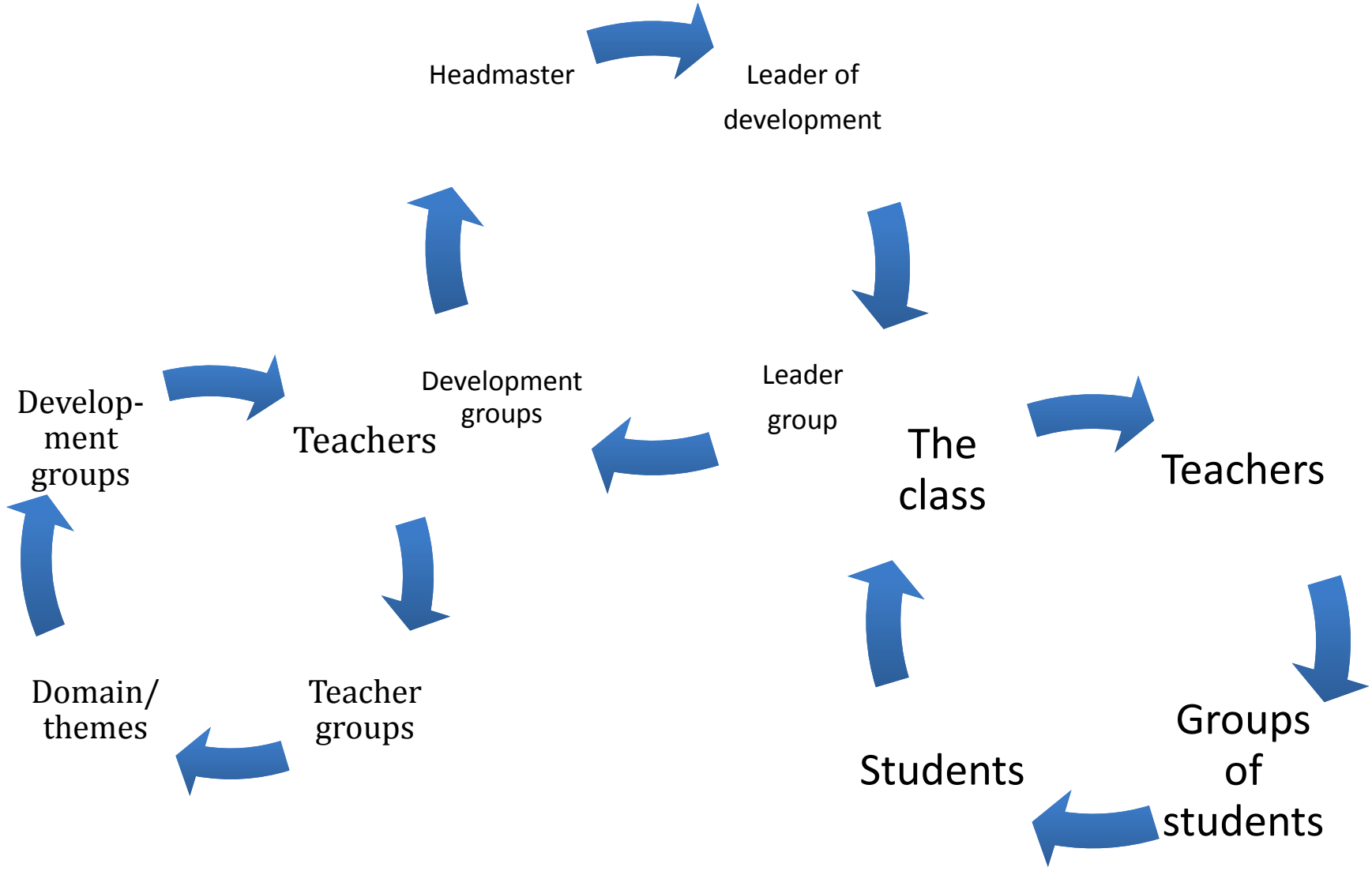
- Assumption – and challenge
  - The analysis that takes a system view will lack necessary details, while detailed studies of learning and teaching will lack a clear connection to the overall system.
  - The educational system is constituted by components that are loosely coupled. The implication is that we need to choose a set of analytic premises for how to integrate different lines of research.

  - Question for the workshop: How do we build evidence for policy? What kind of configuration of results are most effective to improve the performance of the system? What experiences and approaches is used in other countries? How can school subjects be redesigned?

School-systems as loosely coupled systems and different cultures



Schools as loosely coupled systems and different cultures



Evidence of what?

- Where to start?

- Policy – or normative foundations
  - Units of analysis
  - Levels of specification
- Empirical foundation – different types of evidence
  - Units of analysis
  - Levels of specification
  - **Replication**

Evidence of what?

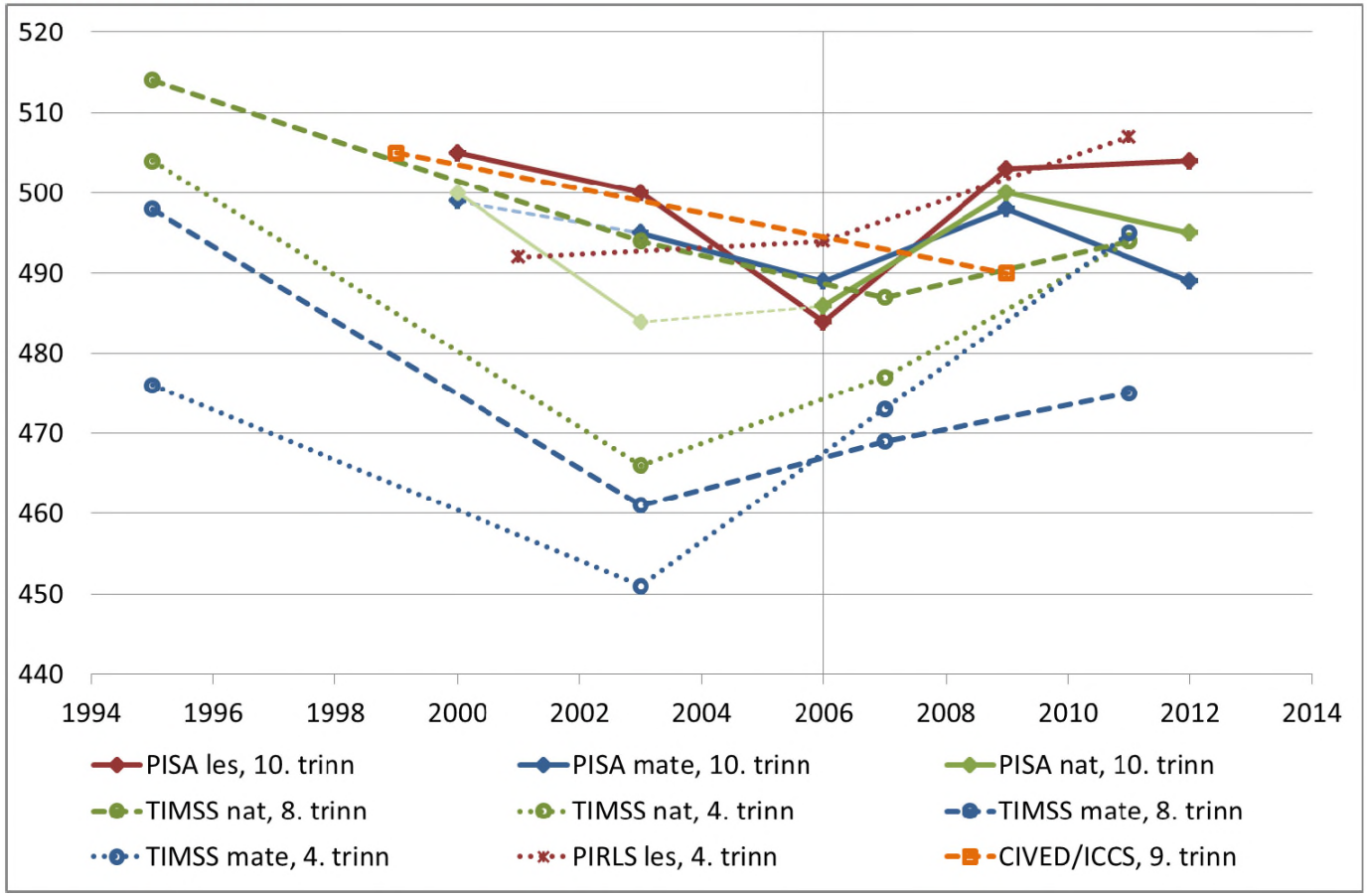
- How do the system work?
  - Analysis of the knowledge promotion reform
  - Key issues: Shift to competence as key concept for regulation of content – performance, delegation to municipalities, national systems for quality assurance

The future of schooling..

- Empirical – statistical orientation
- Analytic approach to the curriculum
  - In-depth learning and learning progression as concepts
  - Variation between subjects and countries' – level of specification –
    - Education psychology within domains
    - Northern Lights TIMSS and PIRLS 2011

Learning outcomes - status

Figur 1: Resultater over tid for PISA, TIMSS, ICCS og PIRLS. Merk at resultater ikke kan sammenliknes på tvers av studiene.



TIMSS, PIRLS, PISA, ICCE

- Performance= cognition and culture

- Measures: descriptive
- Individual cognition (generic and domain specific knowledge
- A differentiated society and schools
  - Variation between students
  - Variation between local cultures
    - Knowledge and cultures become activated in interaction
    - Expectation and motivation (internal/external): played out in local cultures

Findings across classrooms and domains/subjects

- From the knowledge promotion reform
  - Studies of skills (basic/advanced)
  - I studies of classrooms
    - Occurrence of basic skills and learning strategies seems arbitrary – implication: few attempts to engage students in in-depth learning
      - Basic skills: reading, writing, oral, counting (numeracy) digital.
  - Teachers planning
    - Few teachers seems plan for systematic progression of basic skills in subjects/domains and across domains over time
- Assessment
  - Formative assessment has changed and become a key practice in most schools – **plans and tools serve as boundary objects**
  - Formative assessment – collective and individual norms (part of school culture)

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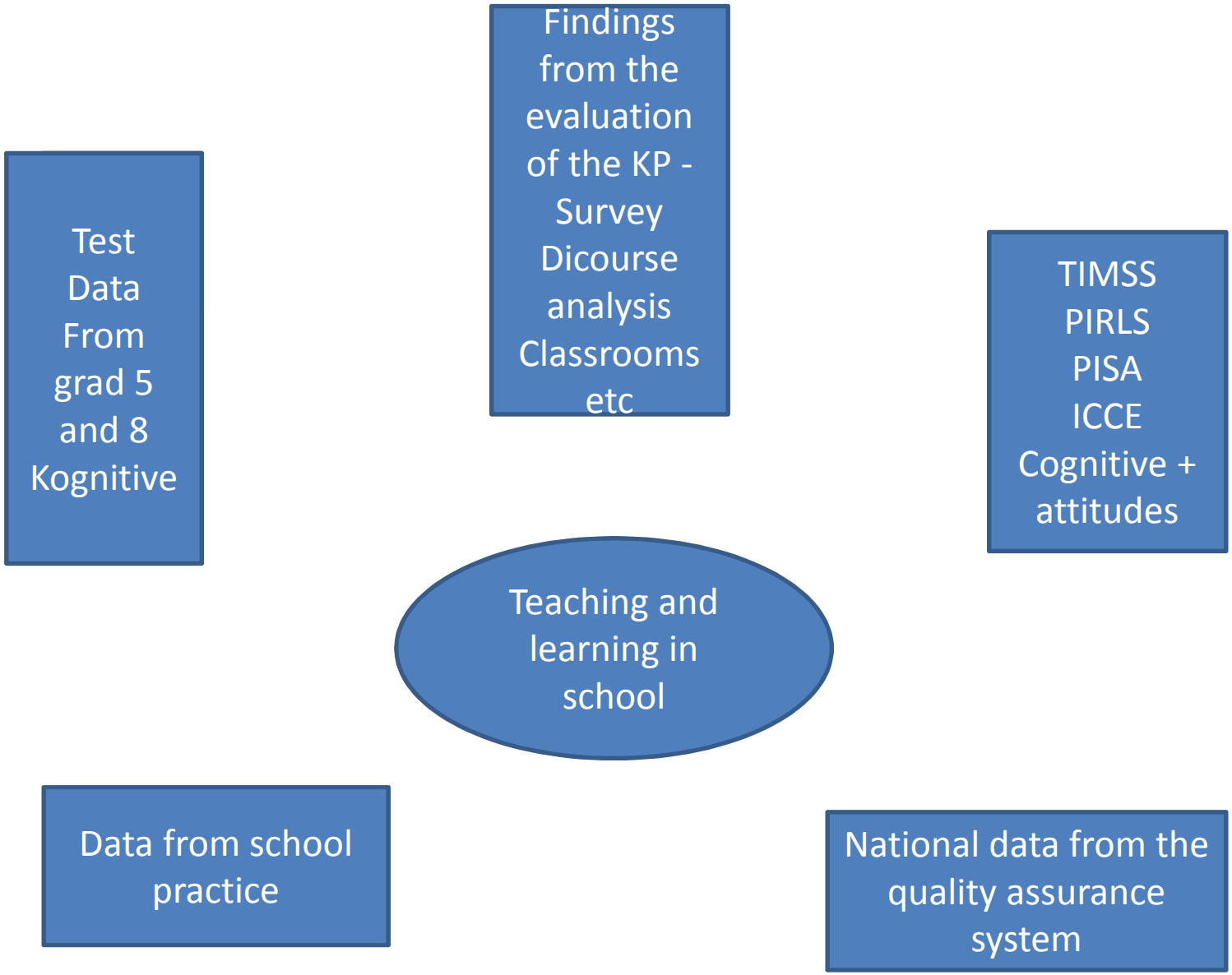
- Core data about:
  - students learning outcome
  - the learning environments
  - teachers competence
  - students learning processes – indications
  - Systemic conditions

    - **Two main challenges: in-depth learning and progression**


Findings from the evaluation of the KP - Survey Dicourse analysis Classrooms etc
Test Data From grad 5 and 8 Kognitive
TIMSS PIRLS PISA ICCE Cognitive + attitudes
Teaching and learning in school
Data from school practice
National data from the quality assurance system

Reconfiguring research strands

- Learning outcomes – Individual/System
  - Test, international studies

- Drop out rate – I/S
- School environment – S
- Background variable I/S

- School as institution – the black box
  - Implementation studies
  - School change studies
  - School effectiveness

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- Strategies for dealing with complexity
  - What types of data and instruments can “travel” across systems and cultures?
  - Statistics, plans, tools, tests…….
  - Quality assurance systems
  - Systems for accountability
  - **Practices – do not travel directly**
    - Vertical and horizontal dimensions

Questions for the workshop

- Question for the workshop:
  - How do we build evidence for policy?
  - What kind of configuration of results are most effective to improve the performance of the system?
  - What experiences and approaches is used in other countries?