

Standards and Teacher Competences

Eckhard Klieme

German Institute for International Educational Research
Frankfurt am Main / Germany
klieme@dipf.de



Association for Teacher Education in Europe
Amsterdam, October 23, 2005

Outline

I. Standards

Lessons to be learned from the implementation of standards for student learning

II. Teacher competences

Research findings on teacher competences compared to current standard statements

III. Teacher education

Using standards as guidelines for the evaluation of teacher education: concepts and results from a study in Hesse

IV. Conclusions

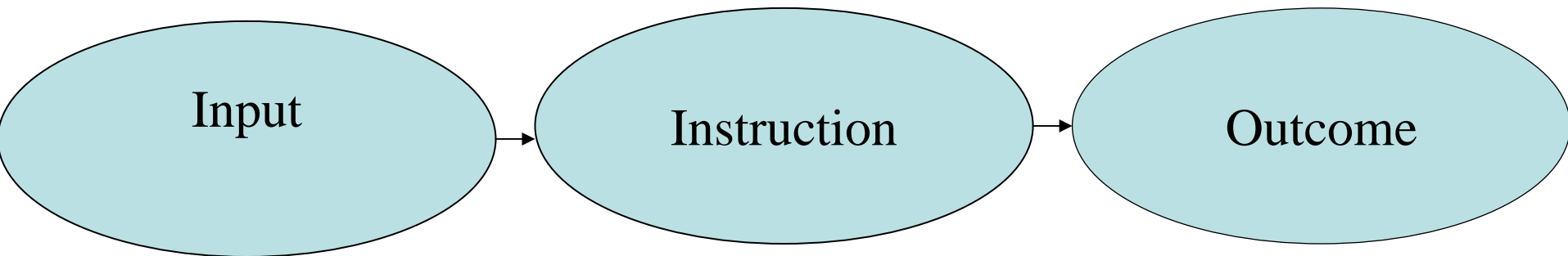
The role of standards in teacher education and teacher training

Part I:

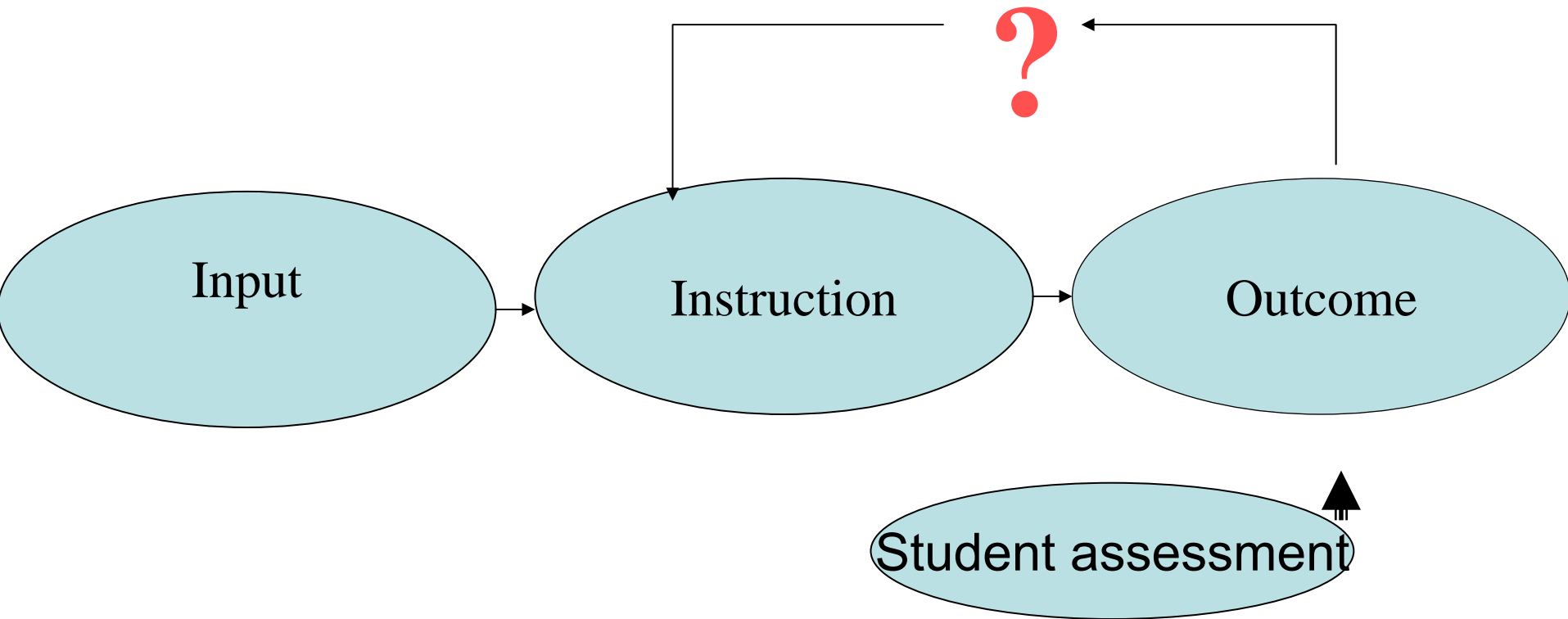
Standards

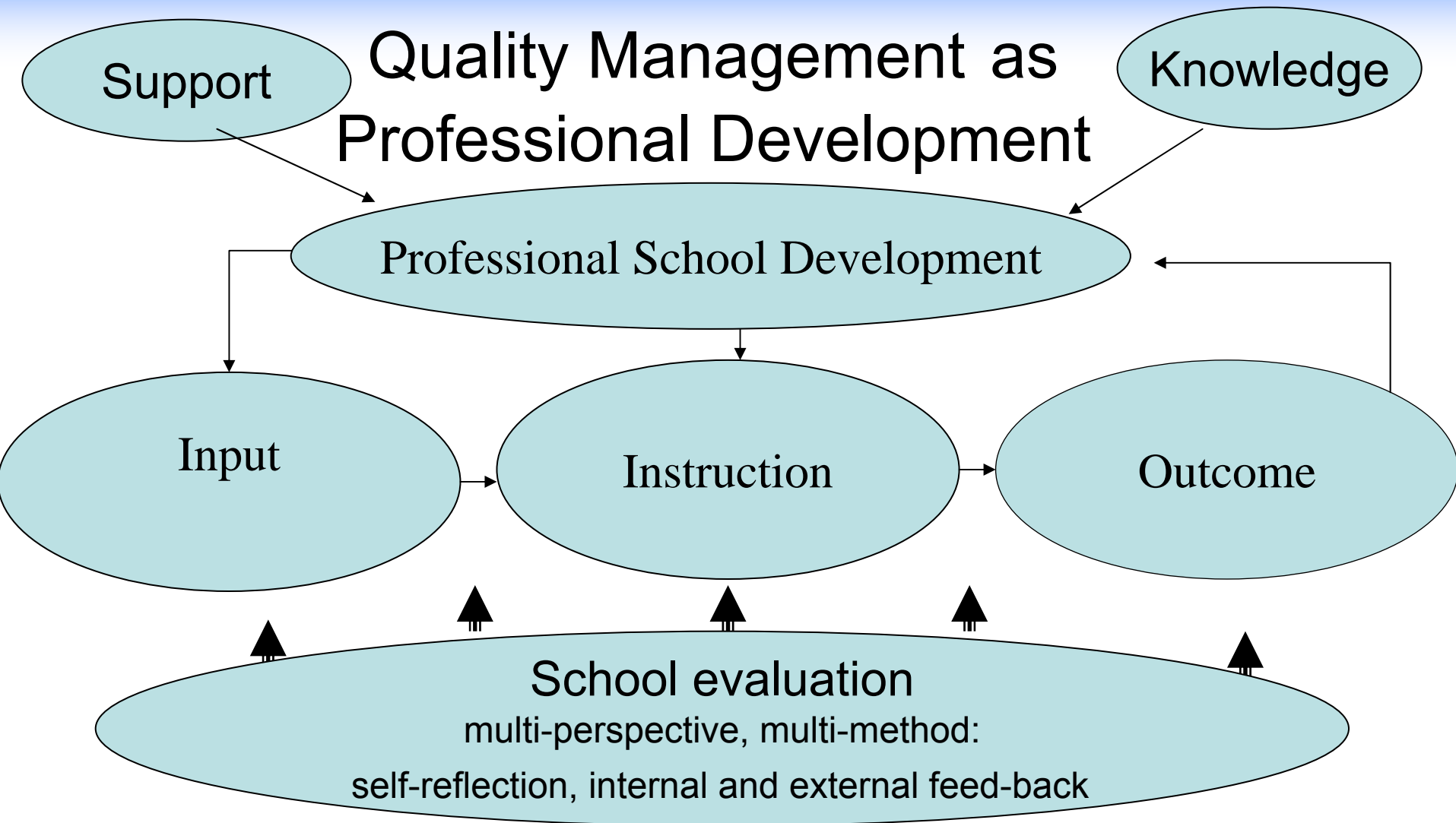
Lessons to be learned
from the implementation of
standards for student learning

Input-Based Quality Management

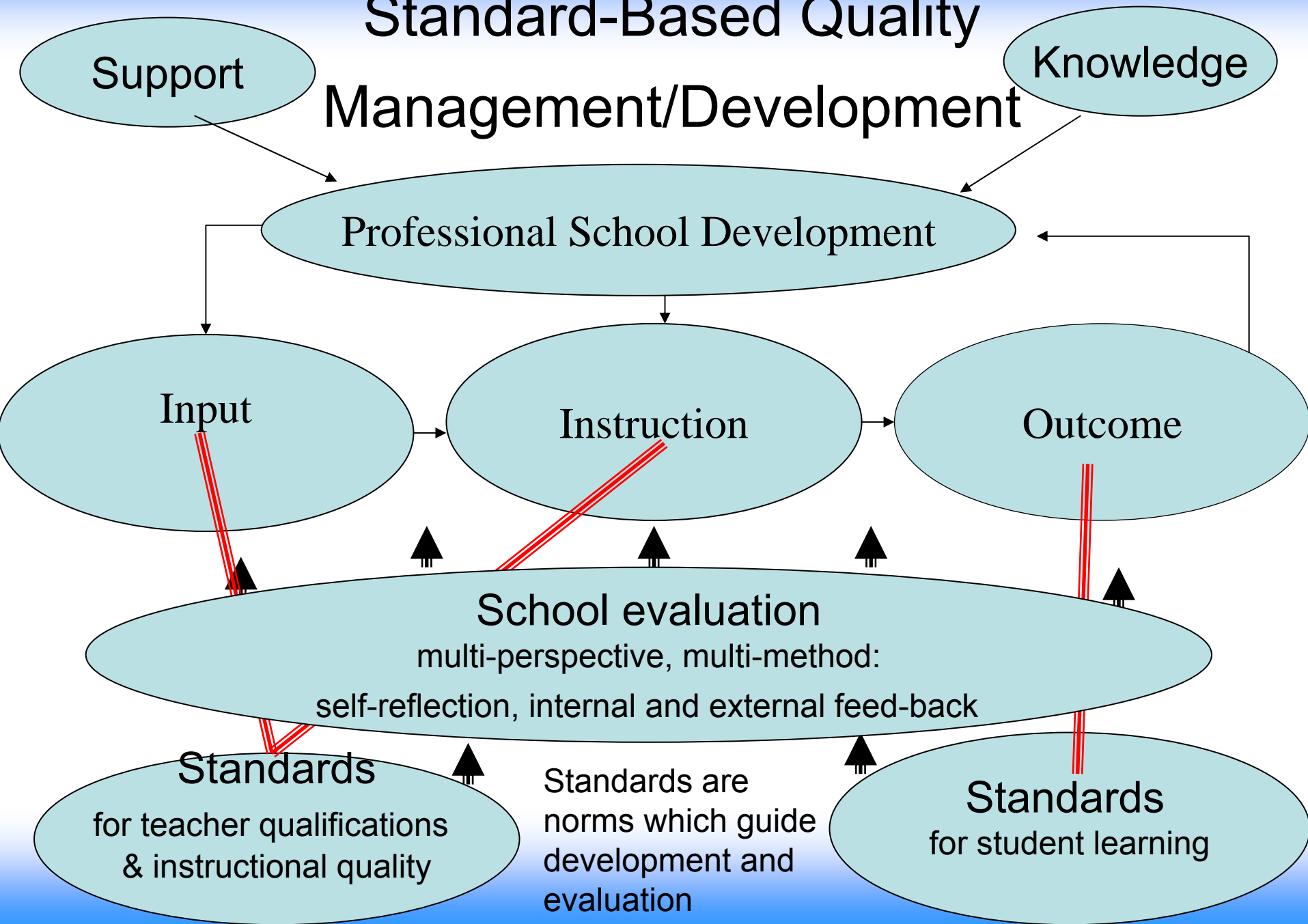


Output-Based Quality Management





Standard-Based Quality Management/Development



Support

Knowledge

Professional School Development

Input

Instruction

Outcome

School evaluation

multi-perspective, multi-method:

self-reflection, internal and external feed-back

Standards

for teacher qualifications
& instructional quality

Standards are
norms which guide
development and
evaluation

Standards

for student learning

Lessons to be learned from the implementation of standards for student learning

Standards have two functions:

- Orientation for pedagogical practice and development
- Frame of reference for
 - assessment (large scale & -partly- classroom based),
 - evaluation (internal/external),
 - accountability

Lessons to be learned from the implementation of standards for student learning

Standards should be

- aligned with general educational goals and values
- clear and understandable
- challenging, but realistic
- flexible → professional autonomy in design of learning environments
- empirically meaningful → frame of reference for evaluation
- implemented with participation of all stakeholders
- accompanied by support for schools and teachers
- competence-oriented

The notion of competence

Bandura (1990)“There is a marked difference between possessing knowledge and skill and being able to use them well under diverse circumstances, many of which contain ambiguous, unpredictable and stressful elements”.

Being able to cope with a certain range of situations = *competence*.

mainly cognitive (based on systematic, domain-specific declarative and procedural knowledge and meta-knowledge), but including beliefs, attitudes, motivations.

The notion of competence

Without sophisticated models of student/teacher competence, standards will

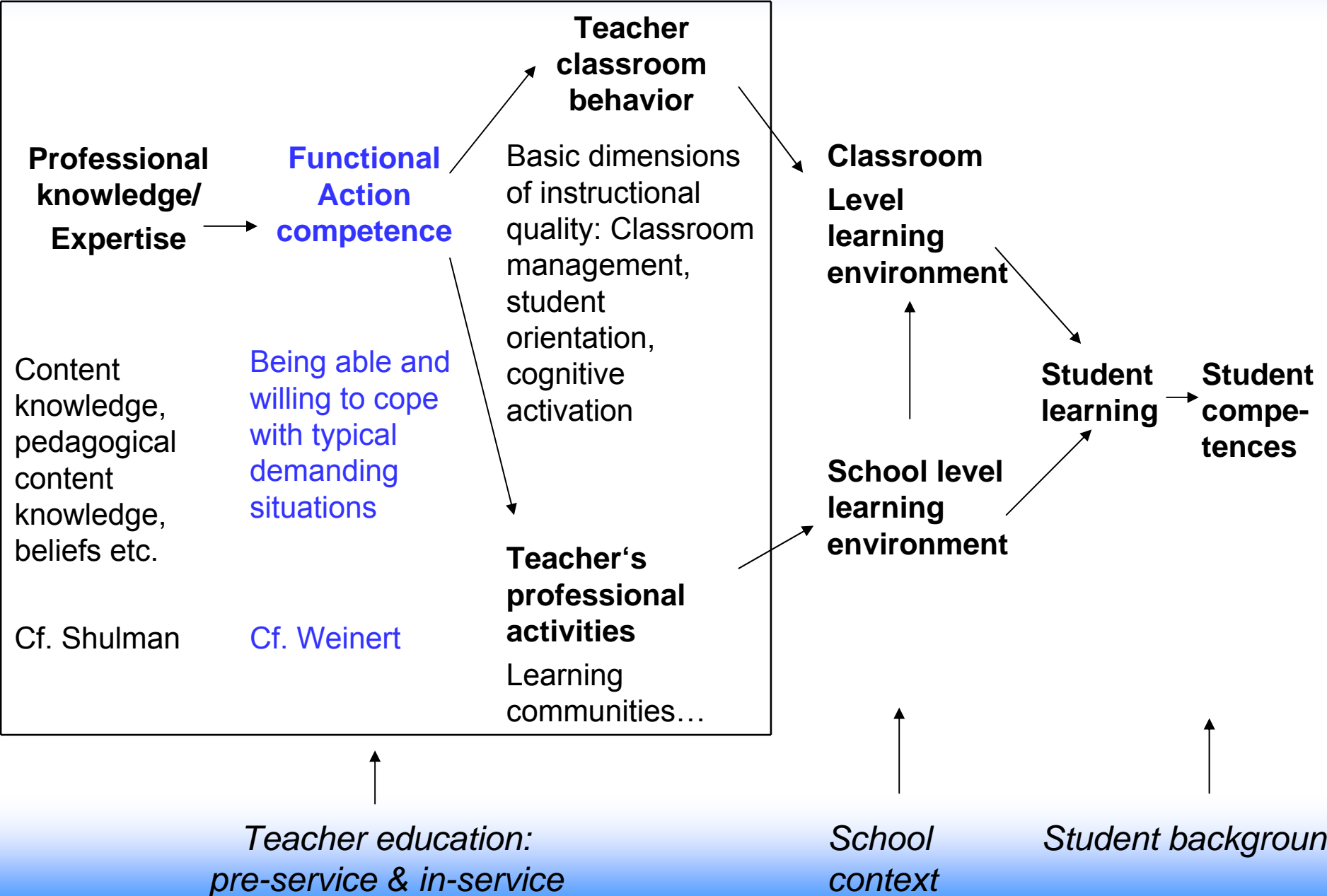
either have no impact at all,

or be reduced to mechanisms of external control.

Part II:

Teacher competences

Research findings on teacher competences
compared to current standard statements



3 basic dimensions of instructional quality

⊕ **Classroom management** (<- direct instruction):

time on task, clarity, structuredness...

⊕ **Student Orientation** (<- self determination theory):

support for autonomy, social embedding,
and competence;

⊕ **Cognitive Activation** (<- constructivist theories):

challenging problems, errors as learning
opportunities,...



Achievement
+ motivation

The Common European Principles for Teacher Competences and Qualifications

Teachers should be able to

- work with information, technology and knowledge
- work with their fellow human beings – learners, colleagues and other partners in education; and
- work with and in society – at local regional, national, European and broader global levels.

Their pedagogic skills should allow them to build and manage learning environments and retain the intellectual freedom to make choices over the delivery of education.

These „principles“ have no function at all for guiding teacher education or quality management in schools.

The Dutch teacher standards

are much in line with findings from educational research.

Survey of competences	with students	with colleagues	with the working environment	with him/herself
interpersonal	1	5	6	7
pedagogical	2			
expert in subject matter and teaching methods	3			
organizational	4			

Dutch standards cover classroom management

4. Organizational competence

An organizationally competent teacher makes sure that his/her students can work in an orderly and task oriented environment. He/she sees to it that they

- know where they stand and how much play they have for initiatives of their own
- know what they must (or can) do, as well as how and with what aim in mind they must (or can) do it.

Dutch standards cover student orientation

1. Interpersonal competence

An interpersonally competent teacher displays good leadership. He/she creates a friendly and cooperative atmosphere and stimulates and achieves open communication. He/she encourages the students' autonomy, and in his/her interaction seeks the right balance between

- guidance and counselling
- steering and following
- confrontation and reconciliation
- corrective measures and stimulation

2. Pedagogical competence

A pedagogically competent teacher offers the students a safe learning- and working environment, where they find their hold and a structure for social, emotional and moral development. He/she makes sure that the students

- know that they belong, that they are welcome and appreciated
- treat each other in a respectful manner and are challenged to take responsibility for one another
- can take initiatives and can work autonomously
- learn to discover their affinities and ambitions, and from there make their choices for study and career.

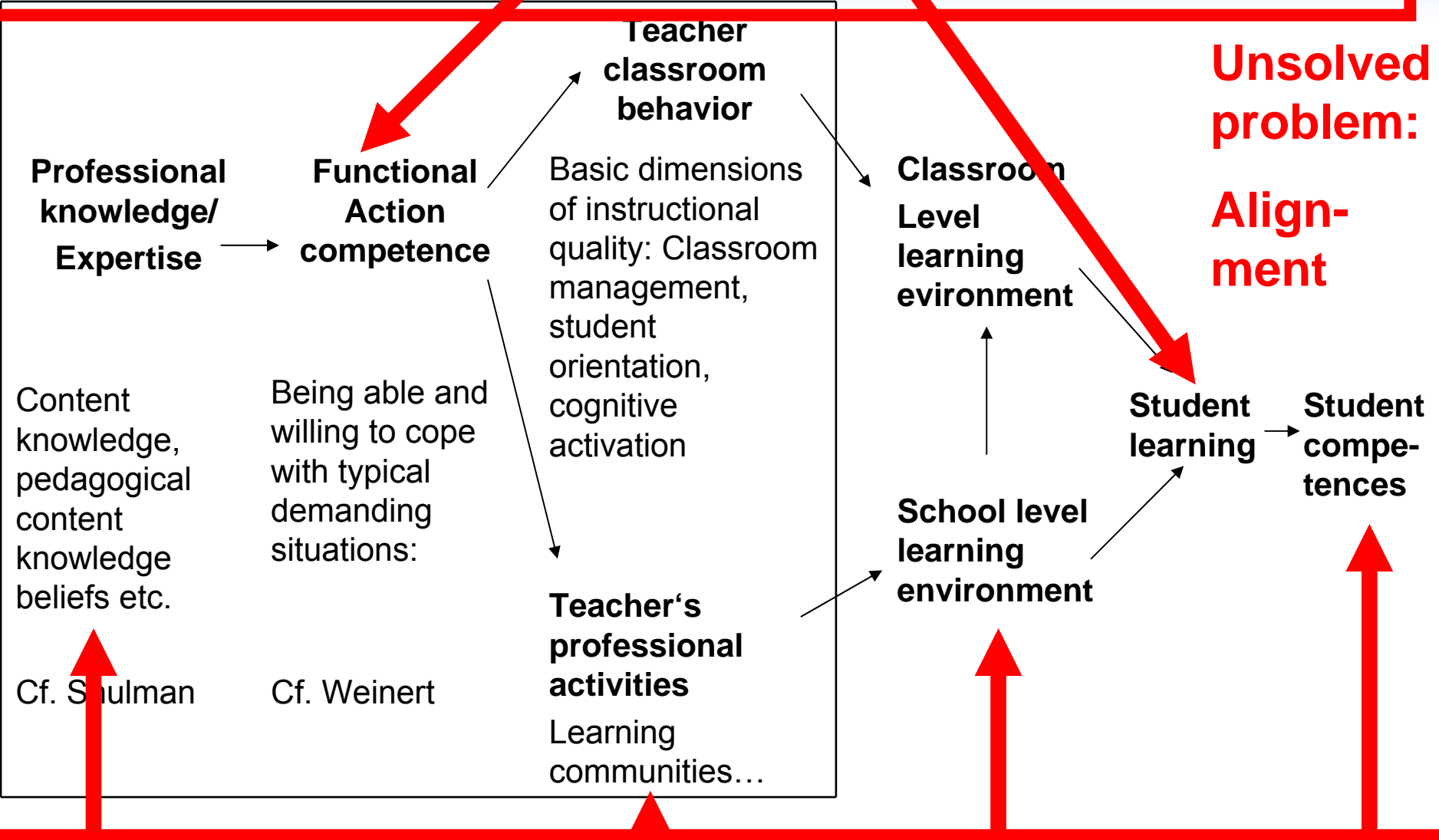
Dutch standards cover cognitive activation partly

3. Knowledge of subject matter & methodological competence

A methodologically competent teacher with a thorough knowledge of subject matter helps his/her students to acquire the necessary cultural baggage knowledge every citizen needs to function as a full member in our society. He/she

- gears the curriculum content as well as all his/her doings to the students and is considerate of individual differences
- determines, together with the student, an (individual) learning route with for instance possibilities for extra-curricular activities, and learning in the context of professional practice
- motivates the students for their learning and working tasks, challenges them to do their best, and helps them accomplish their tasks successfully
- teaches the students how to learn and to work, both from and with each other, in order to enhance their learning autonomy.

teacher standards



Unsolved problem: Alignment

Tests for teacher qualification (US) **teacher & school evaluation** **school development** **ultimate criterion for success**

Part III:

Teacher education

Using standards as guidelines for the
evaluation of teacher education:
Concepts and results from a study in
Hesse (Abs, Döbrich & Klieme)

Context of the study



The Hesse system of teacher education:

- first stage at university
- second stage at „teacher seminars“: two year programm
- three group perspectives: beginning teachers, teacher tutors (school) and teacher educators (seminar)

The notion of standards: based on work by Oser & Oelkers

Beginning teachers: Self assessment of competences

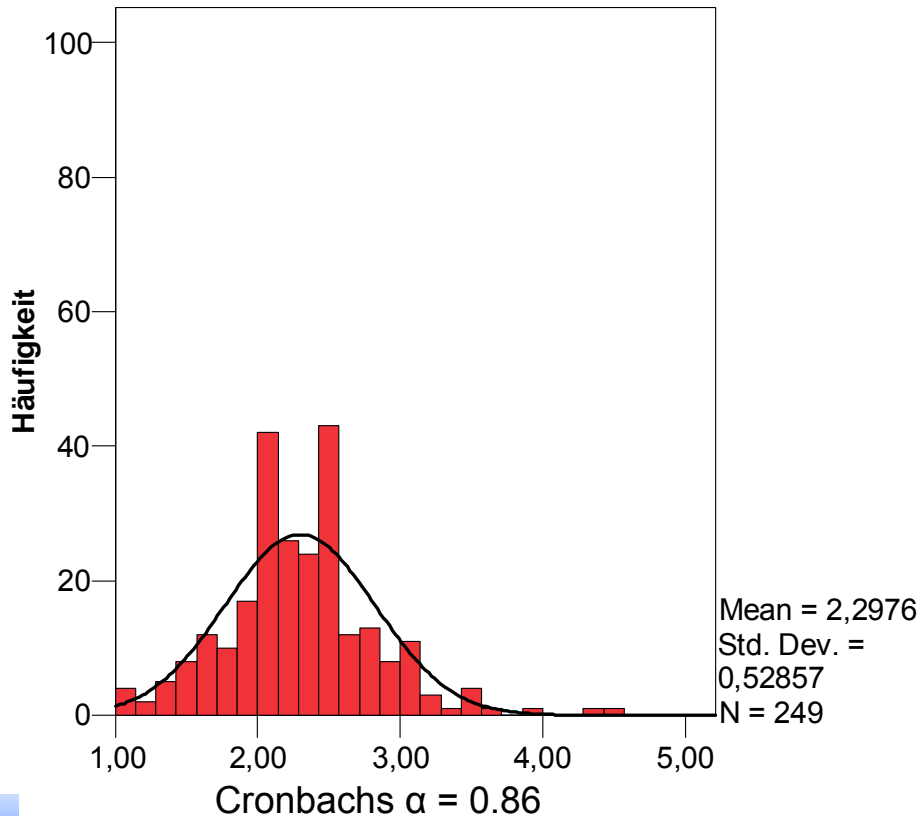
Standard	Mean self assessment (range 1-5)
Develop instructional material	3,5
Understand personal problems	3,4
Foster social competencies	3,3
Structure learning content	3,3
Cope with disciplinary problems	3,2
Give feedback using different norms of reference	3,2
Make use of homework	3,1
Identify talented as well as disabled students	3,1

Standard	Means self assessment (range 1-5)
Train learning strategies	2,9
Understand causes for student failure, aggression etc.	2,9
Foster participation	2,8
Diagnose developmental levels	2,8
Efficiently organize administrative work	2,6
Involve parents	2,6
Integrate students with migrant background	2,5
Use evaluations to improve school	2,5

Teacher educators (at the Seminar): self assessment of training effectiveness

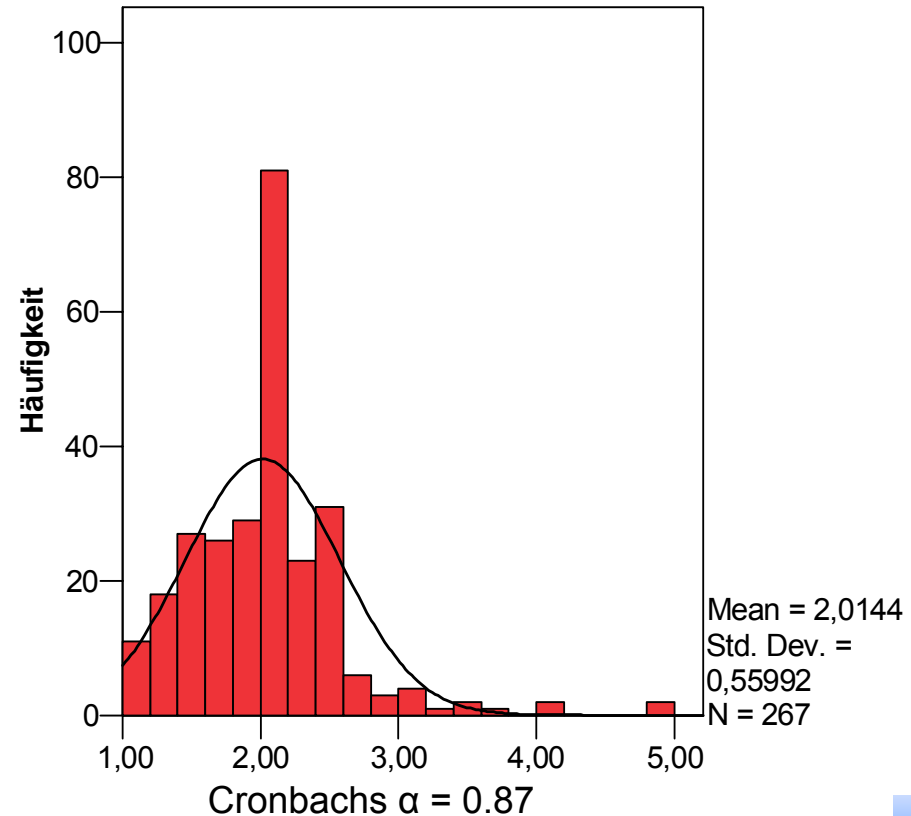
Individualized Diagnosis and support

1) Diagnostik / Fördern



Instruction

2) Planung / Durchführung des Unterrichts



Predicting various outcomes of beginning teachers

Predictor	Competencies			Self efficacy	Overload/ stress
	General	Instruc- tional	Diag- nostic		
Stage	.298***	.334***	.329***	.167***	.134***
Elaboration strategies	.097**	.101**	.083**	.200***	.019
Study time	.076*	.063	.073*	.166***	-.460***
Cohesion among seminar staff	.105**	.158***	.140***	.005	-.051
Coaching	.189***	.105**	.120**	.048	-.036
Mentor's interest	.124***	.097**	.145***	.113**	-.117***
R²	.21	.20	.22	.15	.29

Conclusions from the Hesse study

Standards for teacher education can be used as criteria for the evaluation of teacher education.

The process quality of teacher education (such as cohesion among teacher educators, coaching activities, and tutors' interest in development) can be shown to influence outcomes.

Our framework supports the standards-oriented quality management / development in teacher education.

Part IV:

Conclusions

The role of standards in teacher education and teacher training

Descriptions of competences and standards can create a shared language and frame of reference for communication between the different actors.

It must be avoided that a narrow and simplistic perspective of teacher quality becomes dominant.

Teaching is a complex profession and it is impossible to measure the quality of teachers through standardised tests.

Indicators for the quality of teachers (and teacher educators) should include more than just lists of knowledge and skills.

Standards should address the various dimensions of teacher competences and instructional quality and allow for different profiles of teachers.

The needs and concerns of different actors should be taken into account, above all students' need for a well organized, motivating, and cognitively activating learning environment.

If formulated according to those criteria, standards will serve as a useful frame of reference for evaluation and accountability, as well as orientation for professional pedagogical development.

Quotations from ATEE discussion paper.

Questions for further discussion

1. May standards for teachers be formulated (a) ***in terms of student activities/competences***, or (b) in terms of teacher activities/ competences only?

(a) allows for autonomy in teaching style and methods, but may overestimate teacher accountability for student outcome, while underestimating accountability of students and parents.

2. Which is the function of teacher ***personality and values***?

These factors are important in pedagogical practice, above all in professional development, but it is difficult and may even be harmful to make them explicit in state-wide standards and evaluations.

Recommendation: Focus on competencies, including *task-related* beliefs, attitudes and motivations.

3. How can ***cognitive activation*** (fostering student thinking and understanding) and ***diagnostic competencies*** be approached?

4. How shall teacher competences be ***evaluated***?

Recommendation: Broad internal (self-) reflection, informed by standardized ratings and external observation on well-defined competencies.

Consequences of the evaluation – e.g. internal development activities or additional external support - should be made clear.