

Three Quality Monitoring Elements

Educational Standards and Curricula – Centralized Final Exams – VerA

*Third READ Global Conference and Sixth World Bank ECA Education Conference
“Using Student Assessment Results for Education Quality and Systems Strengthening”*



Starting Point



- In Germany neither the weaker nor the stronger students get enough aid in learning
 - too many students show competencies only on lower levels
 - even the strongest students show only mediocre achievements in international comparison

Questions on three levels



1) Input level: Do our students learn the right things?



2) Didactic level: Do our teachers teach in the right way?



3) Administration level: Are monitoring and regulating of educational processes effective and efficient?



1) Do our students learn the right things?

■ **Criticism:**

- Too much subject matter taught, but too little understood.
- Knowledge stays inactive and cannot be transferred or used.

■ **Reaction:** Development of new curricula

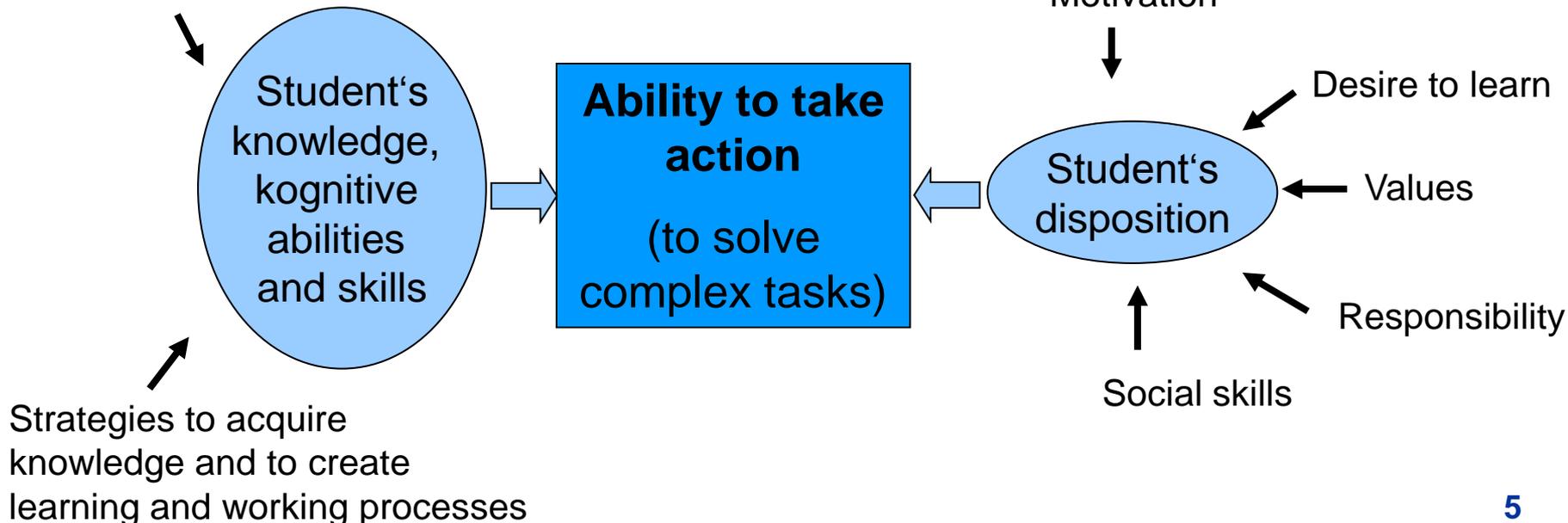
- Curricula describing the main subject matters (**Educational Standards**) and the goals of classroom education (output oriented).
- Curricula focusing on the acquisition of competencies rather than knowledge.



The underlying concept of competencies

Competencies are the ability to solve subject based problems.

Knowledge of subject matter,
understanding of relationships
and structures





2) Do our teachers teach in the right way?

■ Criticism:

- Too much instruction, too little self-directed learning.
- Students with different levels of performance aren't ideally supported.



2) Do our teachers teach in the right way?

- According to educational research teaching is successful if ...
 - the teacher is subject specifically and didactically well-trained.
 - the course of action is clearly structured (obvious goals and tasks; the lessons logically lead one to the other).
 - there is a supporting, student-oriented atmosphere in the classroom (mutual appreciation, cooperation and feedback).
 - the students are activated to process the subject matter through challenging and demanding tasks.
 - different teaching methods are used flexibly.
 - the students master and use metacognitive strategies to reflect their own learning.



2) Do our teachers teach in the right way?

- **Reaction:** Improvement of classroom instruction
 - More informative diagnosis; more support.
 - Stronger focus on problem solving rather than knowledge and routines.
 - More self-directed learning involving the awareness of learning strategies.
 - Cognitively activating learning through varying tasks.



3) Are monitoring and regulating of educational processes effective and efficient?

- **Criticism:** So far the basis for monitoring and regulation of school has been input based (curricula, allocation of teachers, etc.) providing little knowledge about effective results and outcomes.
 - System of Education: the mediocre results in large scale assessment were surprising for politics and administration and did not correspond with the german self-perception of an high quality school system.
 - Schools: The results in report cards and final exams were not comparable – the measure of reference for good or bad grades were too different.



Educational Standards and Centralized Final Exams

- **Reaction:** Introduction of output based methods for monitoring and regulation of school
 - Educational Standards/Curricula describe the target goals but not the specific subject matter that has to be taught following a certain schedule.
 - Centralized final exams in Hesse (after grade levels 9, 10 or 12) allow comparable requirements. These exams set common standards for the expected performance in the different areas of competency and thus shape classroom teaching.



VerA: Vergleichsarbeiten

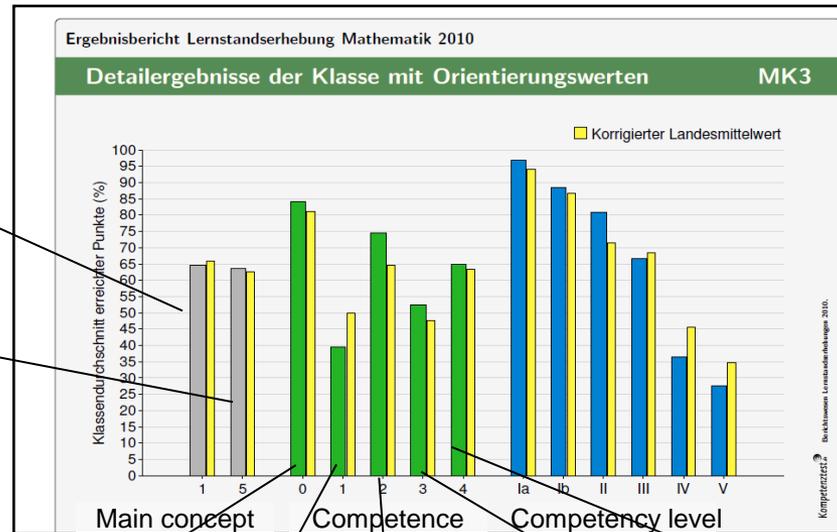
- The VerA tests give information about the level of competency (strengths and weaknesses) reached at a certain point in time:
 - Testing in 3rd grade (German, Maths), 6th and 8th grade (German, Maths, 1st Foreign Language).
 - Measure complex competencies dealing with the subject matter (educational standards) and not reproducible knowledge.
 - Teaching to the test to a large extent ineffective.
 - Standardized tasks following psychometric properties (tested in pilot studies, valid, objective and reliable).



Example of VerA Feedback

Numbers and
Operations

Data, frequency
and probability



Basic technical
skills

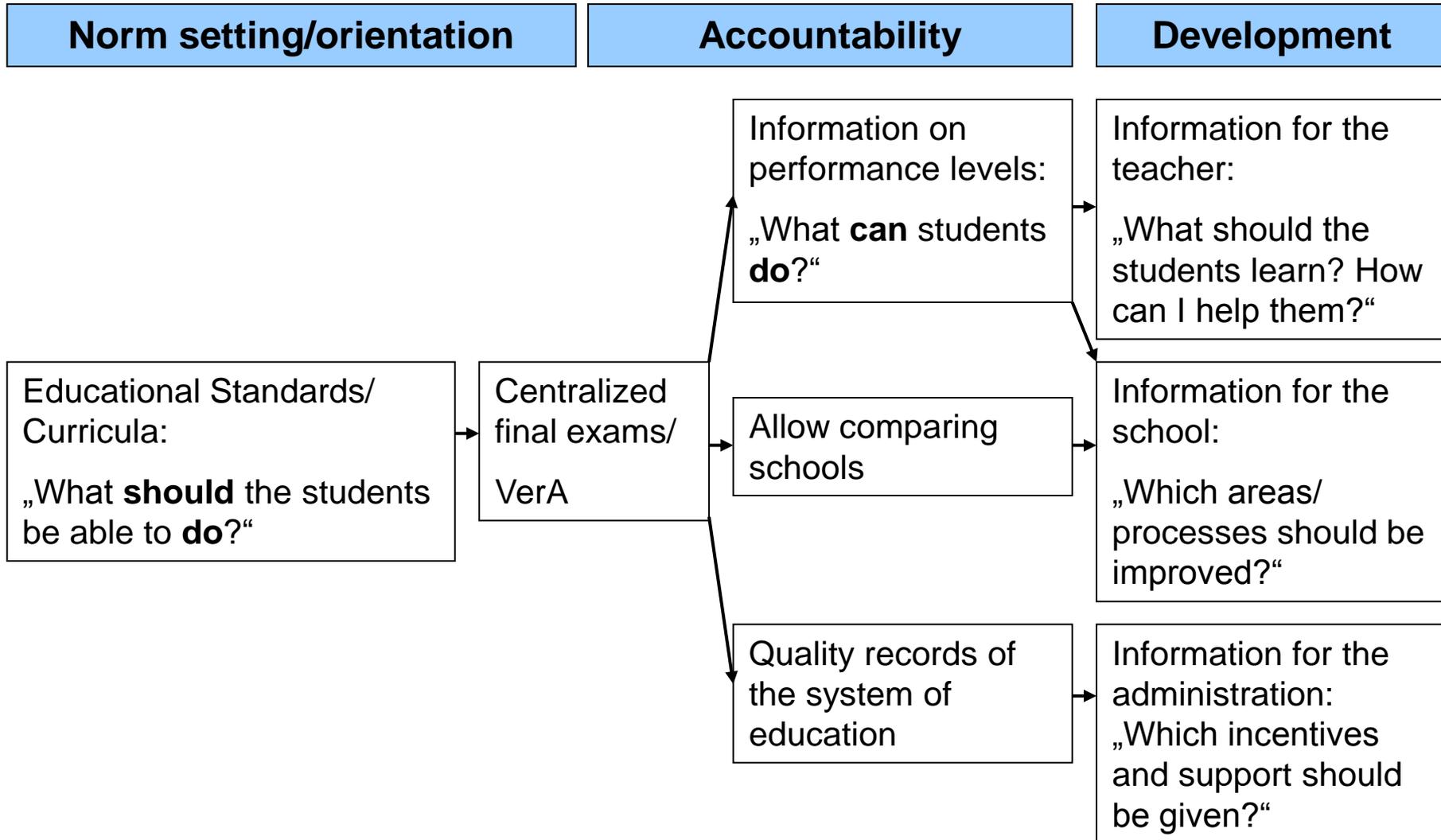
Problem
solving

Communicating

Argueing

Modeling

Elements of the Quality Process



Thank you!

