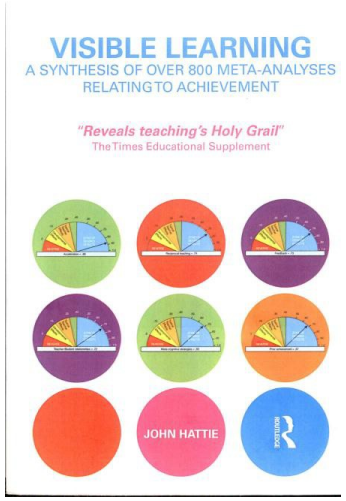
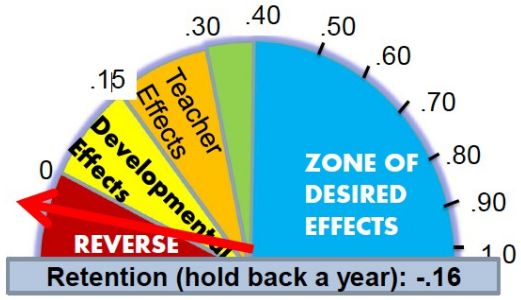


Visible Learning
- John Hattie´s Research -



VT4P
Visible teaching
for Performance

VT4P - Hattie-Study

Agenda

Introduction

1. Preliminary Estimate
2. Presentation of the results
3. discussion
4. perspectives
5. discussion
6. Conclusions

Discussion

Kriticritical review

Beware of the leaderboards! The first impression can be fooled !!

- The effect size does not say anything about the quality of the investigated measures.
- The effect size averages the results of the meta-studies - some are very disparate.
- Anglo-Saxon education and school culture differs from many other european countries.
- Academic (school) learning is only part of the educational mandate.
- Only the interplay of variables makes school and teaching quality.

Example
1. Multi grade/age classes - Effec size .04 = no impact

Question: Why does not it work?

Answer: Because there are almost only results from studies in which the teaching is not adapted to the particular learning situation !!

"It is likely that teachers teach in a similar way to the distribution of age range in the class, and the multi-grade classes are often split by age for grouping"! (Hattie study, p. 93)

If cooperative learning methods are used, the effect size increases by more than 10 times !!

Example
2. open vs. Traditional lectures - Effect size .01 = no impact!

Question: Why does not it work?

Answers:

- Because the data is too small (four meta-studies),
- the studies are outdated (1980 and 1982),
- because there is a problem of definition.

It is also correct: Methods of open teaching achieve high effect sizes:

- reciprocal teaching (pupils as teachers) .74
- Self-questioning .64
- Learning skills (study skills) .59

Example!
3. Direkte Instruktion – effect size .59 – desired effect

Question: Why does it work?

Antwort: Because it is demanding integrated frontal lessons!

„.. the teacher decides the learning intentions and success criteria, makes them transparent to the students, demonstrates them by modeling, evaluates if they understand what they have been told by checking the understanding, and re-telling them what they have told by tying it all together with closure”! (Hattie Studie, S. 206)

Hatties conclusion

- Don´t blame the students!
- „when teachers see learning through the eyes of the student“
- The teacher matters!
- What teachers do matters!

4 key topics

- Dual education system in TVET - Duales Lernen
- Full time/All-Day schooling - Ganztägiges Lernen
- Individualisation of learning - Individualisierung des Lernens
- Differentiation - Differenzierung

4 key topics

- Dual educational system
  - There are no comparable system in anglo-american countries
- All-day learning
  - In anglo-american countries taken for grantedness

4 key topics

- Individualisation - Individualisierung des Lernens
  - reciprocal teaching (0.88) – Schüler als Lehrer
  - feedback (0.74) - Rückmeldungen an Schüler/Lehrer
  - reading/creativity/comprehension programms (0.67)
  - self-verbalization (0.64) – Schülerselbstkontrolle

4 key topics

- Differentiation - Differenzierung
  - teacher clarity (0.75) – Klarheit der Lehrkraft
  - problem-solving teaching (0.61) – problemlösendes Lernen/Lehren
  - cooperative learning (0.57) – kooperatives Lernen
  - peer tutoring (0.55) – Schüler als Lerncoaches
  - classroom management (0.52) - Klassenführung

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What do you think? Active or facilitating Teacher

An active teacher,

passionate for their subject and for learning,

a change agent

OR

A facilitative, inquiry or discovery based provider

of engaging activities

Activator or Facilitator?

An activator

Reciprocal teaching

Feedback

Teaching students self-verbalization

Meta-cognition strategies

Direct instruction

Mastery learning

Goals –challenging

Frequent / effects of testing

Behavorial organizers

A facilitator

Simulations and gaming

Inquiry base teaching

Smaller class sizes

Individualised instruction

Problem-based learning

Different teaching for boys and girls

Web-based learning

Whole Language Reading

Inductive Teaching

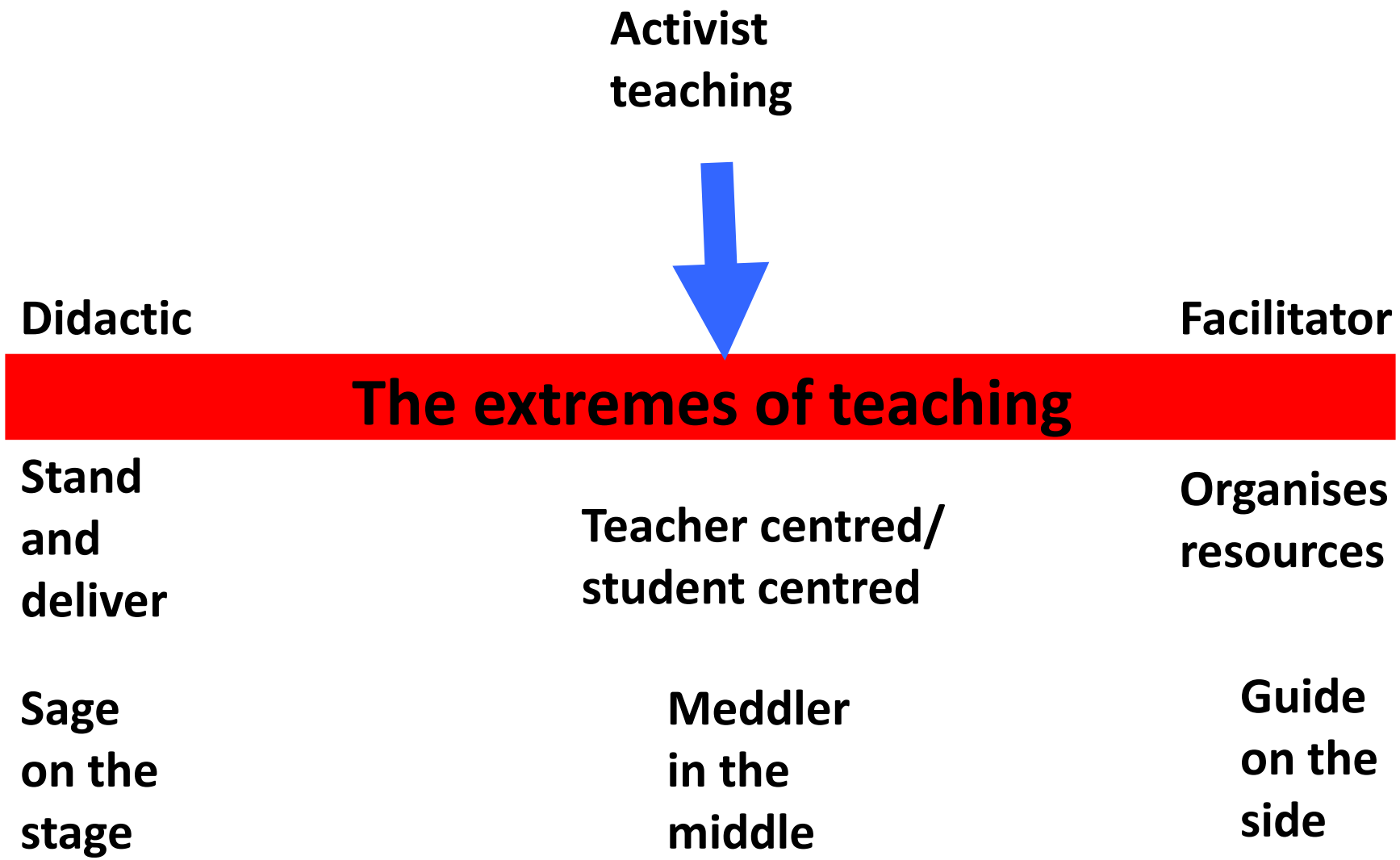
Activator or Facilitator?

An activator	ES
Reciprocal teaching	.74
Feedback	.72
Teaching students self-verbalization	.67
Meta-cognition strategies	.67
Direct instruction	.59
Mastery learning	.57
Goals –challenging	.56
Frequent / effects of testing	.46
Behavorial organizers	.41

.60

A facilitator	ES
Simulations and gaming	.32
Inquiry base teaching	.31
Smaller class sizes	.21
Individualised instruction	.20
Problem-based learning	.15
Different teaching for boys and girls	.12
Web-based learning	.09
Whole Language Reading	.06
Inductive Teaching	.06

.17


Activist
teaching
Didactic
Facilitator
The extremes of teaching
Stand
and
deliver
Teacher centred/
student centred
Organises
resources
Sage
on the
stage
Meddler
in the
middle
Guide
on the
side

Teaching associated with student learning

- Having specific learning intentions and success criteria
- Setting challenging tasks
- Providing multiple opportunities for deliberative practice
- Knowing when one (teacher and student) is successful in attaining goals
- Understanding the critical role of teaching appropriate learning strategies
- Planning and talking about teaching
- Constantly seeking feedback as to the success of the teaching on the students

Teacher contributions to student learning:

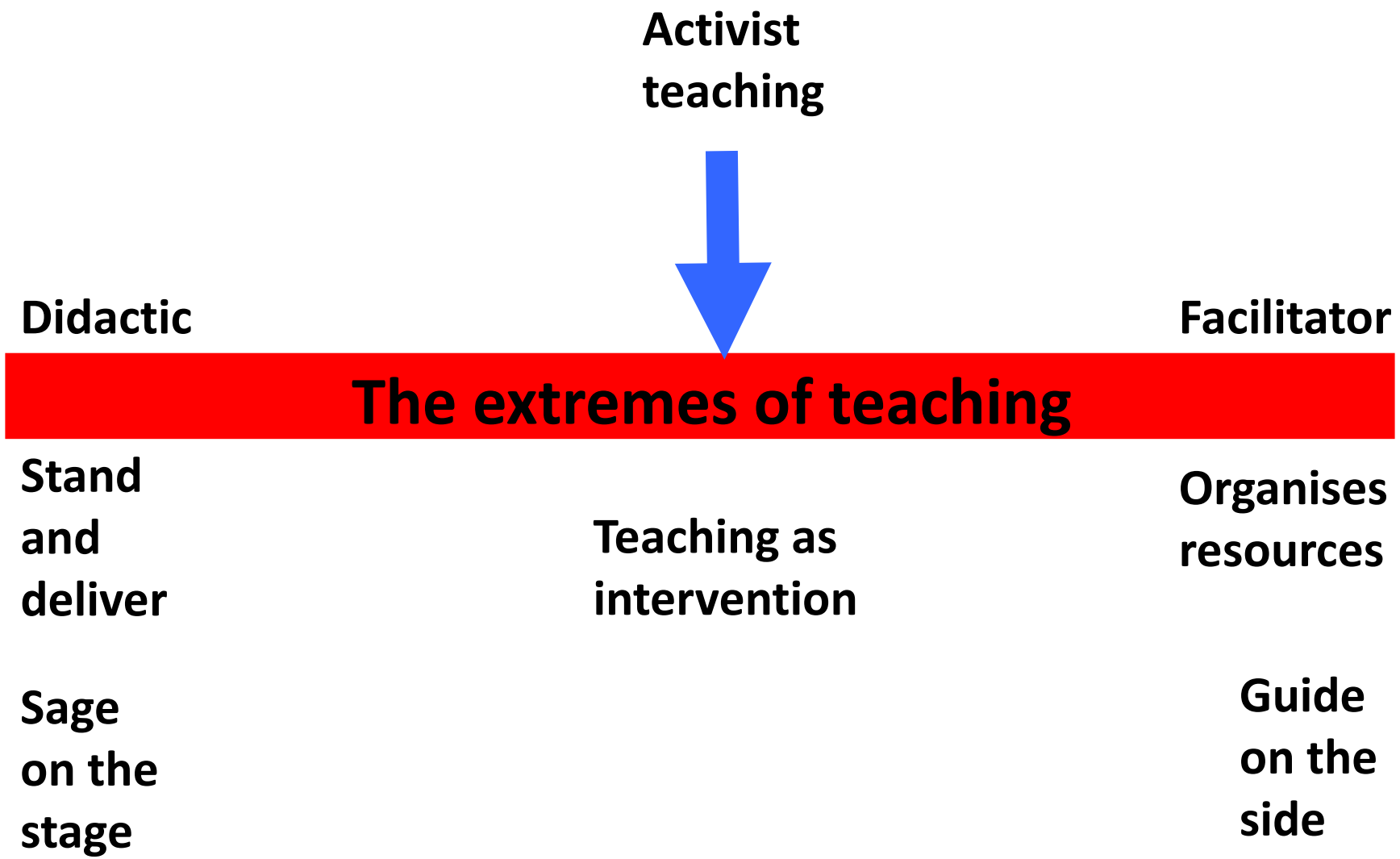
- The quality of teaching – as perceived by the students
- Teacher expectations
- Teachers conceptions of teaching, leaning, assessment and the students – this relates to views of whether all students can progress, whether achievement for all is believed in and whether progress is understood and articulated
- Teacher openness – whether teachers are prepared to be surprised
- Classroom climate having a warm socio-emotional climate in the classroom where errors are not only tolerated but welcome
- A focus on teacher clarity in articulating success criteria and achievements
- A fostering of effort
- The engagement of all students

- **Can be enabled when**

Teachers can critically reflect on their own teaching using classroom-based evidence

- **Can be maximised when**

Teachers are in a safe and caring environment among colleagues and talking about their teaching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MINDFRAME 1 of 8 Teachers/leaders as evaluators

A disposition to asking …

- How do I know this is working?
- How can I compare ‘this’ with ‘that’?
- What is the merit and worth of this influence on learning?
- What is the magnitude of the effect?
- What evidence would convince you that you are wrong?
- Where have you seen this practice installed so that it produces effective results?

MINDFRAME 2 of 8 - it's about the teacher's /leader's mindset, not the kids

- All students can be challenged
- Strategies not styles
- Develop high student expectations
- Enhance help seeking
- Develop assessment capable students
- The power of developing peer interactions
- The power of critique/error/feedback
- Self-regulations and seeing students as teachers

Do not blame students

MINDFRAME 3 of 8 teachers/leaders as CHANGE AGENTS

- Achievement is changeable and enhanceable vs. immutable and fixed
- Teaching as an enabler not a barrier
- Engage in the total learning and
- not break into steps and chunks
- The Power of learning intentions
- The Power of success criteria

MINDFRAME 4 of 8
Teachers/leaders gaining feedback about themselves

Feedback is

- information provided by an agent (e.g., teacher, peer, book, parent, self/experience)
- regarding aspects of one's performance or understanding.

MINDFRAME 5 of 8

AFT = Assessment as feedback to teachers

- Who did you teach well, who not so well?
- What did you teach well, not so well?
- Where are the gaps, strengths, achieved, to be achieved?
- Levels and Progress
- Developing a common conception of progress
- Use assessment info not to make judgements about your efficacy as a person but what you need to work on as a teacher!!

MINDFRAME 7 of 8

Dialogue not Monologue

What can I say –
we talk too much!

80% of classroom time
is estimated
as being teacher-talking
– needs to be reversed

MINDFRAME 8 of 8

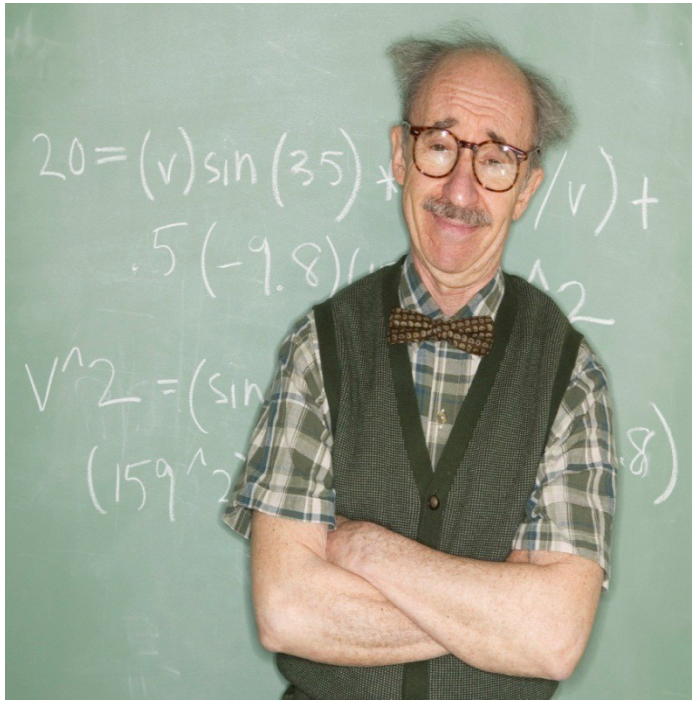
It's about "not knowing"/error: relationships in classrooms

The importance of error and not knowing …

- Build trust and rapport
- Student more than teacher questioning
- Teacher clarity, support, and What's next
- Peer teaching, assessment, learning
- It's more about the learning than the teaching
- We don't have to be the experts!!

What some teachers/leaders do!

- **Clear learning intentions**
- **Challenging success criteria**
- **Range of learning strategies**
- **Know when students are not progressing**
- **Providing feedback**
- **Visibly learns themselves**



Such that students ...

- **Understand learning intentions**
- **Are challenged by success criteria**
- **Develop a range of learning strategies**

Students need to learn to ask of themselves

- **Where am I going?**
- **How am I going (progress)?**
- **Where to next?**

The students can't ask the questions unless we teach them how to ask them, that means *we* need to frame the way we structure our lessons around that sort of immediate feedback

Bildungspolitische Forderungen

resp

Visible Teaching, Assessing, Learning and Leading Model (VTALL)

Office of School Improvement – Virginia Department of Education (2011-2012)

Visible Teaching

- Shows caring and respect for students' needs, responses and diversity
- Uses small group options: pairs, cooperative learning, guided reading, reciprocal teaching, etc.
- Assigns/uses leveled and varied text: articles, magazines, fiction, non-fiction, internet, etc.
- Uses management strategies to reduce disruptions in learning: clear expectations, rules and procedures, etc.
- Clarifies and articulates specific learning objectives/learning intentions.
- Provides direct/explicit instruction and models what students should know or do to master objectives.
- Develops vocabulary and connects concepts and ideas.
- Questions for high level thinking and deep learning.
- Maintains instructional clarity across less organization, explanation, examples and guided practice.
- Differentiates through re-teaching, acceleration and enrichment, etc.

Visible Assessing

- Identifies and communicates challenging success criteria in checklists and rubrics.
- Pre-assesses to determine what students already know and can do.
- Checks for understanding and achievement of learning intentions.
- Provides specific descriptive feedback.
- Engages students in self-assessment of their work, what they learn, and how they learn.
- Uses existing products or samples as models for student products.
- Uses assessments aligned with objectives/learning intentions/standards and instructional processes.
- Provides choices in assessment products.
- Engages students in giving specific feedback to peers and to the teacher.
- Involves students in setting learning goals.

Visible Learning

- Uses manipulatives and technology.
- Engages in making decisions and choices.
- Applies cognition strategies: make connections, question, summarize, infer, synthesize, visualize, big ideas.
- Engages in reading.
- Engages in writing.
- Engages in discussing text.
- Engages in problem solving or creates products.
- Engages in peer tutoring, cooperative learning, reciprocal teaching and other cooperative structures.
- Creates/uses advanced/graphic organizers, concept mapping, logs, interactive notebooks and foldables.
- Engages in relevant, real-world learning experiences that advance 21st Century Skills.

Visible Leading

- Articulates a vision of high expectations for 21st Century Schools
- Builds capacity through modeling, supervision and coaching.
- Redesigns structures, roles, and functions to support visible assessing, teaching, learning and leading.
- Provides feedback by using observation protocols to "look for" and discuss visible assessing, teaching, and learning.
- Creates structures that promote collaboration and inquiry
- Designs/provides high quality individual and school professional development based on performance data and standards.
- Analyzes policy to determine those that may impede visible assessing, teaching, learning and leading.
- Uses assessments, data and research to improve practice and student learning.
- Provides open, honest communication to foster improvement.
- Promotes a culture of efficacy and optimism for improving visible assessing, teaching, learning and leadership.

Critical review - revisited

Results are outdated and therefore no longer relevant

No, although studies that are used are older, more recent research findings (for example on self-directed learning, for example Dignath, Büttner & Langfeldt, 2008) validate the findings of the Hattie study

Critical review - revisited

Cognitive achievements are in the foreground

yes, but we also know that the cognitive and the affective-motivational development correspond with each other

for example,

- achievement and self-concept,
- achievement and competence experience
- Achievement and motivation)

Results cement the image of directive, teacher-led teaching and are incompatible with constructivist ideas and theories

directive: no, teacher-led: yes,

Hattie's results do not paint the picture of a boring frontal lesson, but the image of a lesson in which

- the teachers profess their responsibility for student´s learning
- a fearless teaching climate prevails and mistakes are understood as learning causes
- students are challenged
- students are systematically guided to self-control learning
- students are cognitively activated

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Bildungspolitische Herausforderungen

Welche empirische Evidenz gibt es für eine Maßnahme?

- Legitimationsaspekt

Wie ist die Maßnahme gedacht? Wie funktioniert sie? Worauf kommt es dabei an?

- Verständnisaspekt

Können das erfahrene Lehrpersonen demonstrieren? Funktioniert das in der Praxis?

- Realisierungsaspekt:

Wo und wie kann das – im Hattieschen Dreischritt (surface knowledge, deeper understanding, construct knowledge) – gelernt werden? Q

- Qualifizierungsaspekt

Wie stellt die Schulverwaltung sicher, dass die Maßnahme wirkt und Regelpraxis wird

- Kontrollaspekt, Qualitätssicherung

Bildungspolitische Perspektiven

- Ziel- und Wirkungsorientierung (empirische Evidenz; Wende?)
- Einfachstruktur, Konzentration auf die Haupt- bzw. Basiskomponenten; Begrenzung von Maßnahmen
- Praxisorientierung (Machbarkeit, Anschlussfähigkeit)
- Finanzierbarkeit (langfristige Sicherung)
- Langfristigkeit

Bildungspolitische Perspektiven

- ‚Konzepttreue' und Verbindlichkeit
- Beständigkeit (Kontinuität, Konsistenz, Kohäsion)
- Abgestimmtheit (auch Anschlussfähigkeit) der Maßnahmen
- Abgestimmtheit der Aufgabenrollen und Handlungsebenen
- Information und Dialog (Partizipation)

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Fazit – Schule ist für die Zukunft

Schule ist Lernort und Lebenswelt

- Schule ist vielfältiger
- Die Welt der Kinder nicht kolonialisieren

Schule ist eine Gesellschaft im Kleinen

- Bildung ist auch Arbeit an Haltungen, die weder gemessen noch bewertet werden können
- nicht ausschließlich funktionalisieren

Nicht Alles, was gut zu messen ist, ist auch gut

- Hattie-Studie misst Lernerfolg fachbezogen, aber Wissenschaft wird zunehmend inter- und transdisziplinär
- Kompetenzerwerb, -erweiterung, und -aufbau sind weitaus komplexer

Fazit – Schule ist mehr als ein Lernort

Schule bedeutet auch Zeit für Kinder

- nicht ausschließlich ökonomisieren
- Es ist nicht immer schlimm, wenn Kinder nur so schnell lernen, wie sie es auch ohne Unterricht tun würden

Schulentwicklung unterstützen durch Evidenz–

- Schulentwicklern sollten gut aufbereitete Forschungsdaten zur Verfügung stehen
- Schule entwickeln, Schule leiten heißt Entscheidungen treffen – empirische Studien sind hier Entscheidungshilfen (nicht Zwänge)