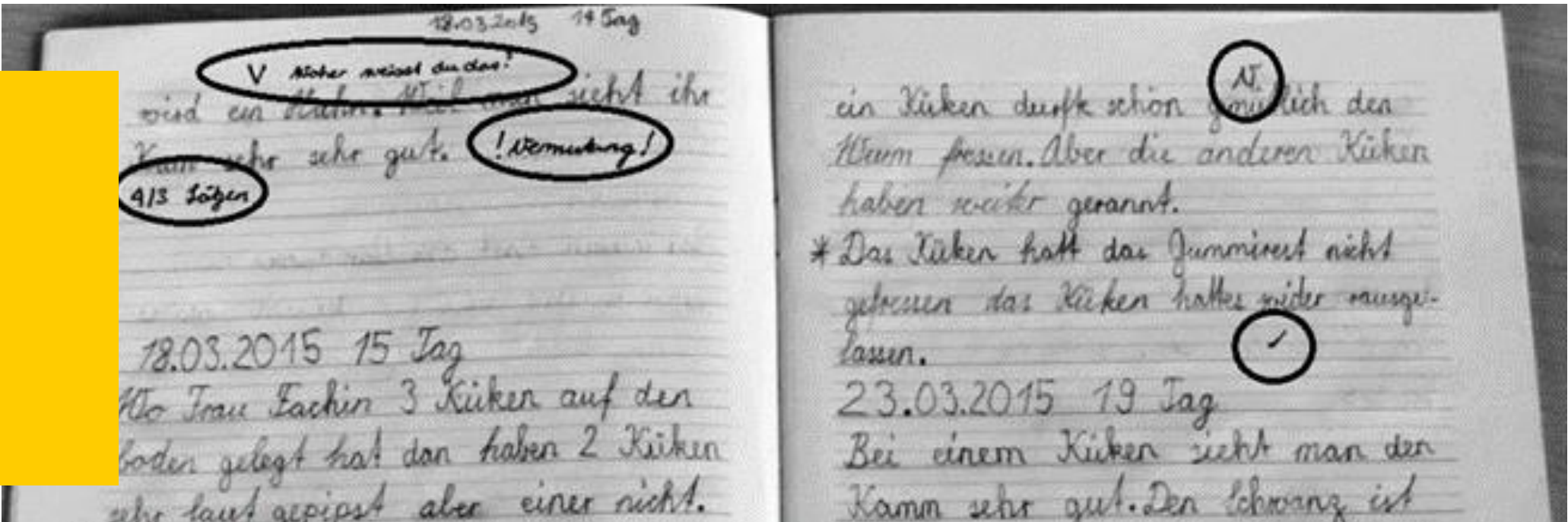


Teachers' Written Feedback

Aspects of quality, benefits, and challenges



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Feedback: Purpose and indicators of quality

Feedback has the purpose “reduc[ing] discrepancies between current understandings / performance and a desired goal” (Hattie & Timperley, 2007, p. 87)

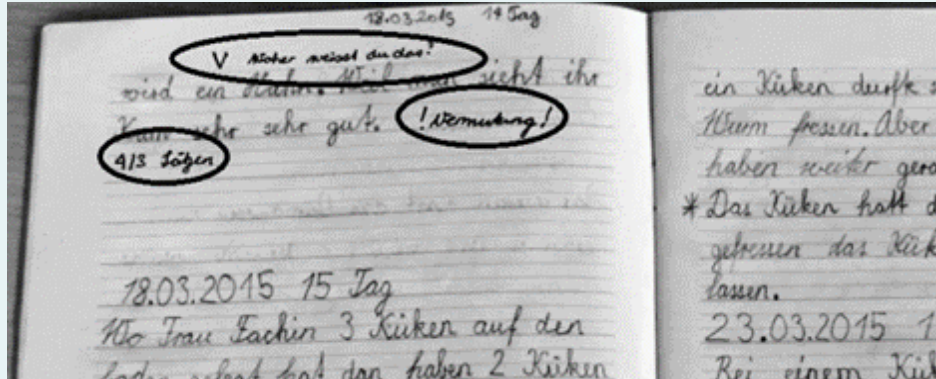
Good feedback

- Is linked to predefined assessment criteria
- Includes a justification for a judgement
- Reassures motivational beliefs and aids recipient in adequate self-assessment
- Is given timely, complete, contains enough detail and is formulated in a clear way

(Brookhart, 2008; Harks, Rakoczy, Hattie, Besser, & Klieme, 2014)

→ **Focus of this presentation on written feedback provided by the teacher in the form of rubrics and open comments**

Rubrics and open comments

| Rubrics | Open comments | | | | | | | | | | | | | | | | | | | | |
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| Wird aus dem Modell klar, was eine Halbwertszeit ist und weshalb die Entladung von Kondensatoren ein exponentiell abfallendes Verhalten zeigt? | | | | | | | | | | | | | | | | | | | | | |
| <p>Teacher Perspective</p> <ul style="list-style-type: none"> • Help to clarify teacher's expectations (Andrade, 2005) • Useful for students but not for teachers (So & Lee, 2011; Bharuthram, 2015) | <p>Teacher Perspective (Bruno and Santos, 2010)</p> <ul style="list-style-type: none"> • How to select what to comment on? • How to avoid giving away part of the answer but to still provide useful guidance? | | | | | | | | | | | | | | | | | | | | |

Research Questions

RQ1: To what extent can rubrics and templates for written feedback help teachers to provide effective feedback?

RQ2: Which benefits and problems do teachers see in using rubrics and open comments for written feedback?

Design

Sample

- N = 19 classes; Germany N = 5, Switzerland N = 4; Denmark N = 10

Coded materials

Teachers' written feedback

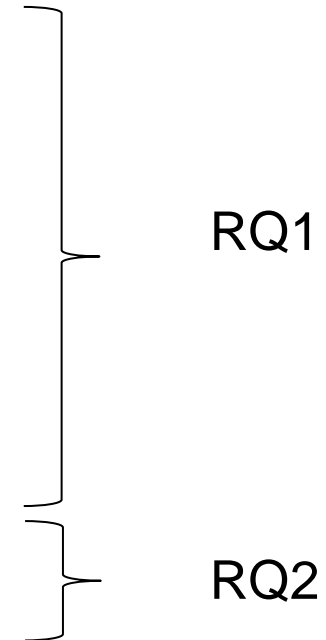
- Focus of feedback on learning goals
- Justification of judgement
- Guidance about concrete next steps

Initial and revised student artefacts

- Students addressment of feedback in their second artefact

Self-reporting questionnaire

- Strengths and weaknesses of written feedback



Results – Teachers' provision of feedback

Focus on learning goals

- Teachers were generally able to refer to previously specified criteria in their feedback → feedback was not detached from the learning goals

Justification of judgement

- D: Teachers tended to justify their references to what the students had not yet achieved
- CH: Teachers provided few justifications
- DK: No analysis possible

Results – Feedback and its use by students

Guidance about concrete next steps

- Teachers provided specific guidance on next steps; at times rather abstractly

Relation between provision of guidance and use of feedback by students

- D: Abstract way of formulating next steps leads to not using the feedback
- CH: Use of feedback may depend on the time provided to students to engage with the feedback and the continuity of working on an artefact
- DK: No clear relation between specificity of guidance and uptake of feedback

→ **Use of feedback depends on context**

Results - Benefits and challenges of written feedback

| Benefits | Challenges |
|--|--|
| <p>Enhanced student learning and student self-regulation</p> <p>Enhanced student-teacher relation and student motivation</p> | <p>Time needed for planning formative assessment activities and for formulating feedback</p> |
| <p>Insight in students' level of achievement</p> <p>Opportunity to reflect upon assessment practice for teachers</p> | <p>Teacher assessment literacy; e.g. selecting specific aspects; or providing reliable / effective feedback without giving away the solution</p> |
| <p>Transparency for students and teachers</p> | <p>Student use of feedback</p> |
| <p>Combination with summative assessment</p> | |

Conclusions

- Written feedback can be used meaningfully for formative assessment in science learning
- Tools, ideas and examples of good practice do support teachers - they are, however, not sufficient to enable teachers to provide effective feedback
- Role of pre-and in service professional development → read chapter 7

Further Research

- From explorative study to controlled or systematically varied variables
 - Different school levels
 - Different subjects
 - Different student groups
 - Teachers' experience with written feedback
 - ...
- Integration of student perspective
 - Students' opinion
 - Effect on student learning and on self-regulation
 - ...

Questions for discussion

- Pre- and in-service training in teacher written feedback: What is needed?
- Continue discussion from group discussions in the morning