

UNIVERSITY OF TWENTE.



# THE USE OF FORMATIVE ASSESSMENT BY TEACHERS IN SECONDARY EDUCATION IN THE NETHERLANDS

SESSION: THE USE OF FORMATIVE ASSESSMENT  
RESULTS TO EDUCATE ALL IN DIVERSE DEMOCRACIES:  
RESEARCH RESULTS FROM FOUR DIFFERENT COUNTRIES

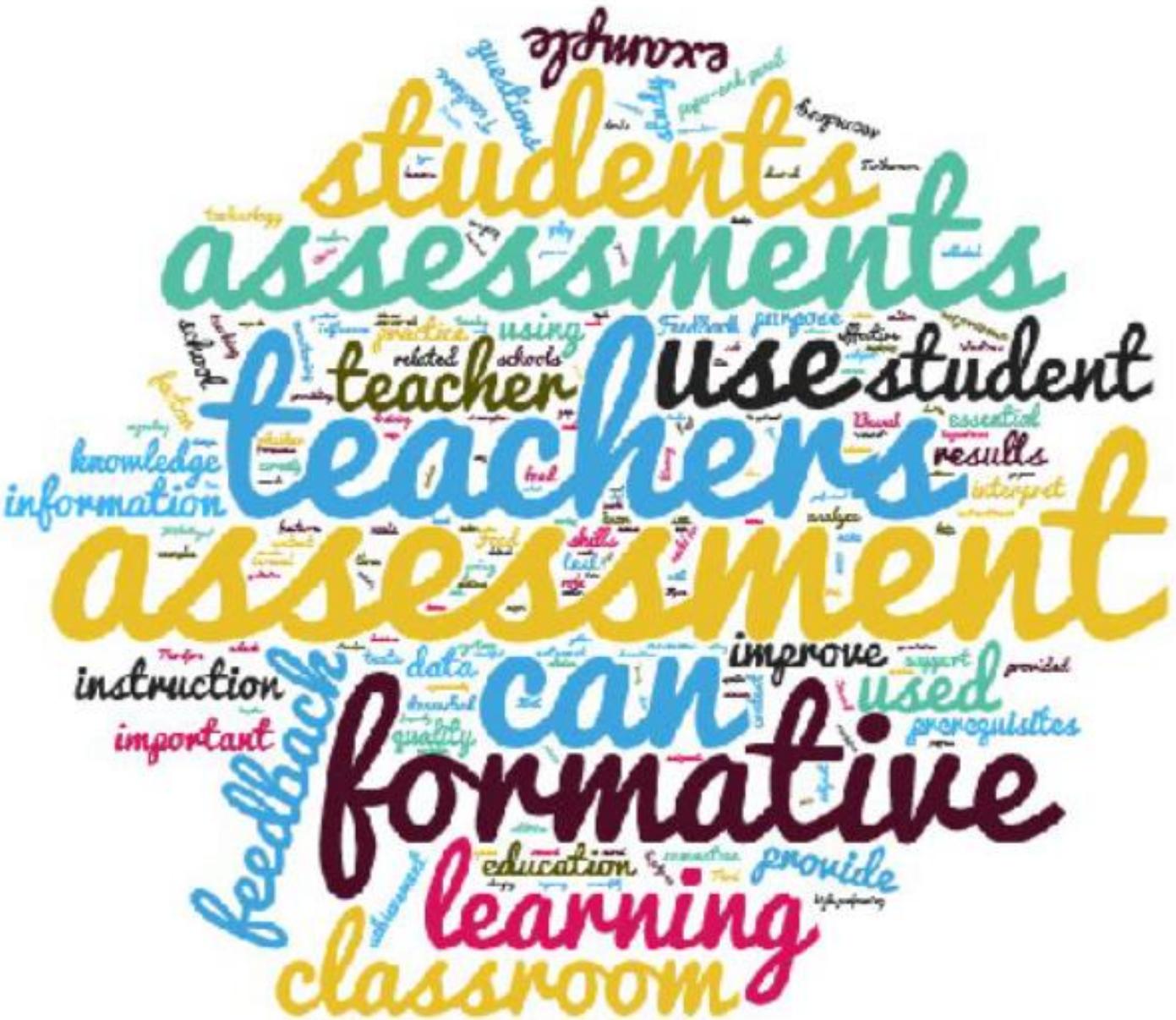


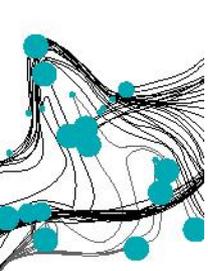
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AERA, WASHINGTON, APRIL 10<sup>TH</sup>, 2016

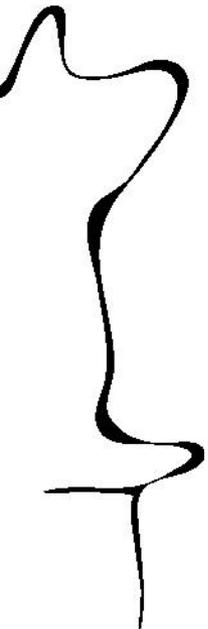






# INTRODUCTION FORMATIVE ASSESSMENT

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- Formative assessment<sup>1,2,6,8</sup>
  - teachers and students derive information from *assessments*
  - use this as *feedback*
  - to improve the quality of *teachers' instruction*
  - to improve the quality of *students' learning*
  
- better learning outcomes for students
- higher quality of education



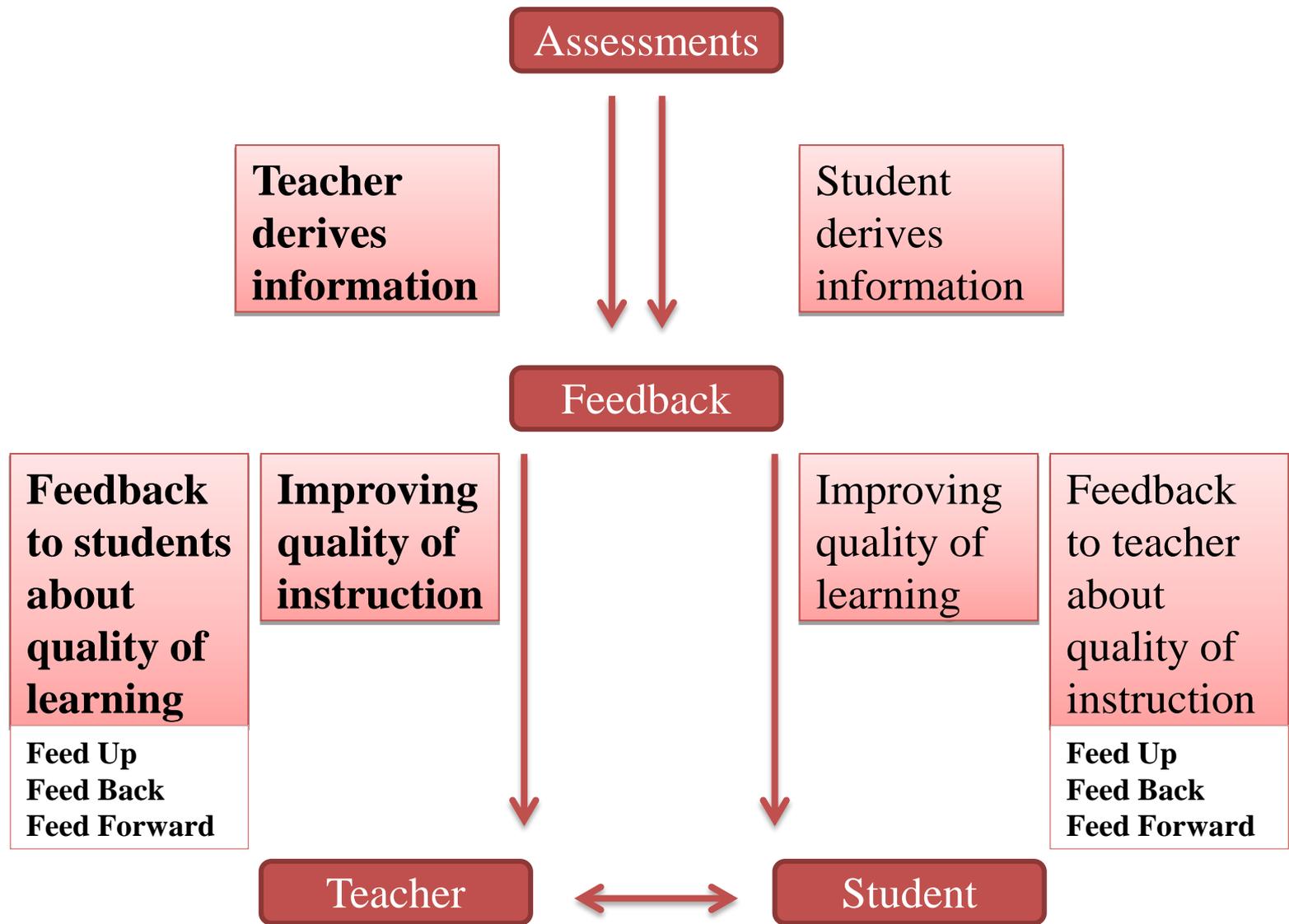
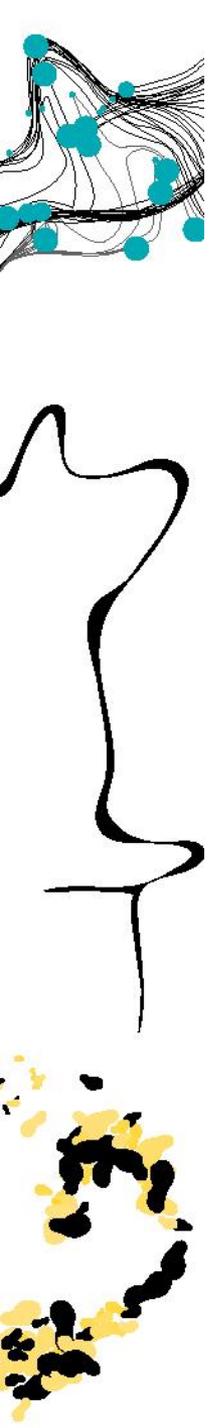
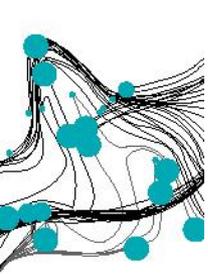
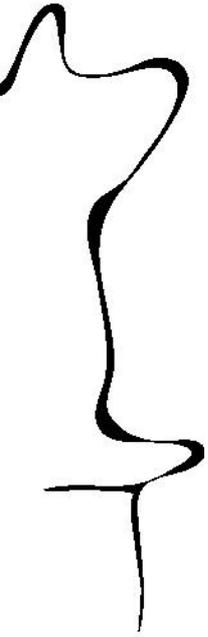


FIGURE. THE ROLE OF FEEDBACK IN FORMATIVE ASSESSMENT (KIPPERS ET AL., SUBMITTED FOR PUBLICATION)



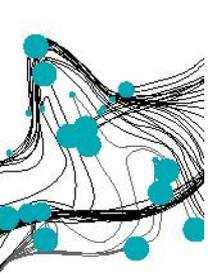
## PROBLEM STATEMENT AND RESEARCH AIM

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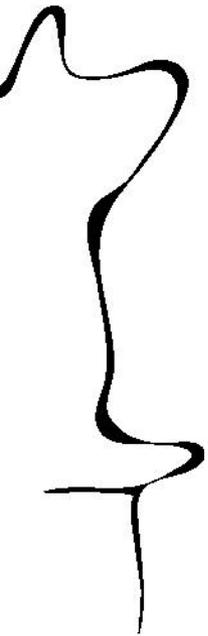
- Lack of knowledge and skills
  - Little or no attention paid to formative assessment
  - Focus on summative assessment
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- Research aim: exploring the current use of formative assessment by teachers in high-performing secondary schools





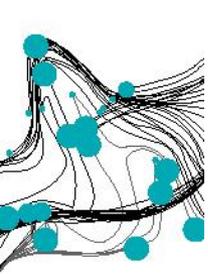
## RESEARCH QUESTIONS

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1. Which *classroom assessments* are most frequently used by teachers in high-performing secondary schools?
2. How do teachers in high-performing secondary schools use *feedback*?
3. Which *prerequisites* do teachers in high-performing secondary schools most frequently describe as important for their formative assessment use?





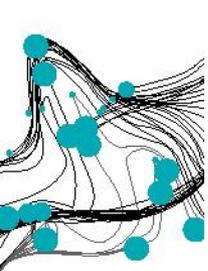
## METHOD

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- Explorative qualitative research methodology
- 4 high-performing Dutch schools
- Each school: 1 English teacher, 1 Dutch teacher and 1 mathematics teacher
  
- Individual in-depth interviews with 12 teachers
- Checklists for 12 teachers
- Descriptive analyses





# RESULTS

## RQ1 ASSESSMENTS

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- Three most used assessments:
  1. Paper-and-pencil tests
  2. Asking questions
  3. Classroom conversations

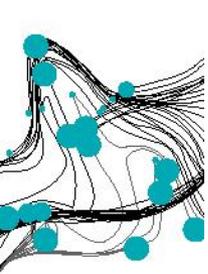
*'We actually always use paper-and-pencil tests.'*

*'I continually try to ask open questions.'*

- Three less used assessments:
  1. Digital assessments
  2. Practical tasks
  3. Questionnaires

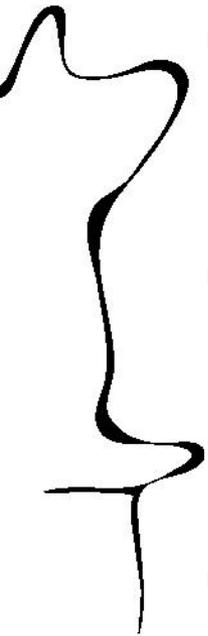
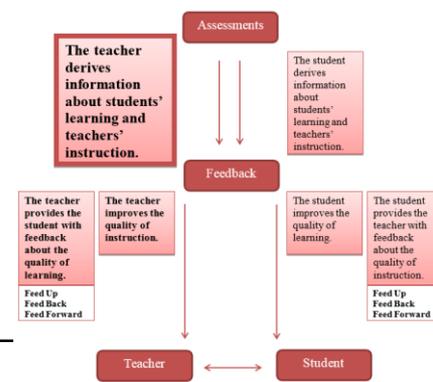
*'Some students, such as those with dyslexia, may also work digitally.'*





# RESULTS

## RQ2 FEEDBACK: THE TEACHER DERIVES INFORMATION FROM ASSESSMENTS

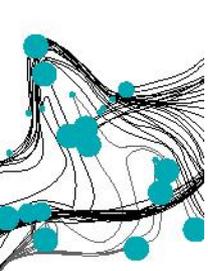


- Information about students' learning
- Information not derived on daily basis
- Information derived to judge students' effort

*'To gain information on the knowledge students have not mastered yet.'*

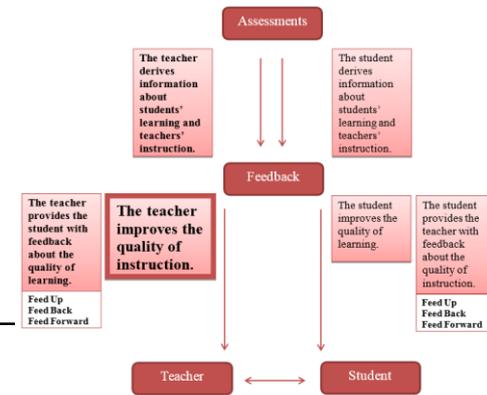
*'Sometimes, I see student grades from a month ago and then I think "This student has a low grade, I actually have no idea anymore why".'*





# RESULTS

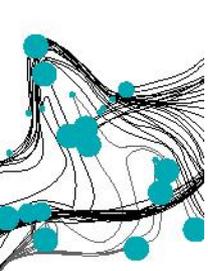
## RQ2 FEEDBACK: THE TEACHER IMPROVES THE QUALITY OF HIS/HER INSTRUCTION



- Teacher explains learning content to students in another way
- Teachers repeat same instruction
- Teachers call parents, tell students they have to practice more, tell students they have to take extra lessons

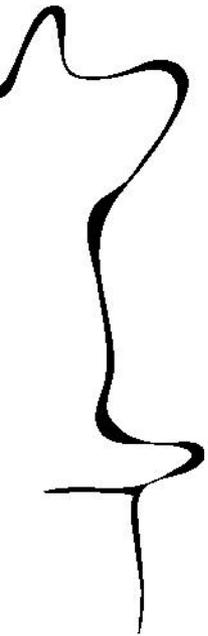
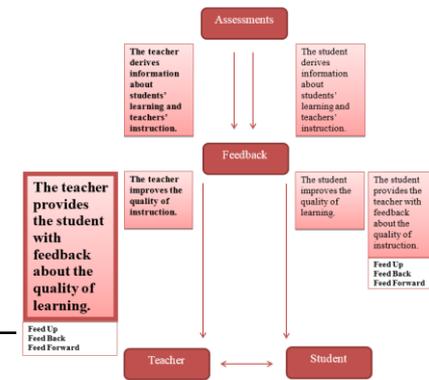
*'(...) and then I know I should adjust the pace, I should re-teach much more.'*





# RESULTS

## RQ2 FEEDBACK: THE TEACHER PROVIDES THE STUDENT WITH FEEDBACK

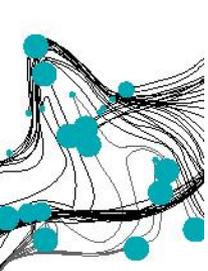


- Oral and written feedback
- Quality of feedback could be improved: learning objectives and specific feedback (e.g., not only grades)

*'The learning objectives are given in the teaching method (...) Therefore, I do not feel I have to mention the learning objectives to the students.'*

*'I write in capital letters on the test "YOU DID NOT LEARN THE IDIOM".'*





## RESULTS

### RQ3 PREREQUISITES

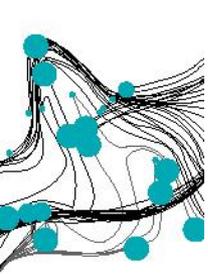
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- Five most important prerequisites:
    1. Positive attitude of teachers towards formative assessment
    2. Specific feedback provided by assessments
    3. Alignment between assessments and curriculum
    4. School leaders facilitating formative assessment use
    5. Teachers' knowledge and skills to adjust instruction
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*'You have to pay attention to your students, know what is going on and be willing.'*

*'Students should be aware of the learning objectives.'*

*'The fourth-, fifty-minute schedule should be changed in a seventy- or eighty-minute schedule.'*



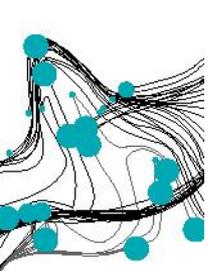
## CONCLUSIONS AND DISCUSSION

### RQ1: ASSESSMENTS

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- Top five of assessments: paper-and-pencil tests, asking questions, classroom conversations, homework assignments, observations
- Use of various assessment sources can provide teachers with a comprehensive overview of students' learning needs<sup>6,7</sup>
- Involving students in the formative assessment process (e.g., classroom conversations) can increase student engagement and students' knowledge and skills<sup>6,7</sup>



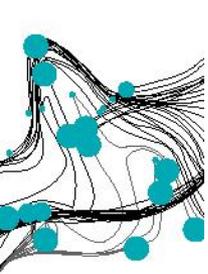
## CONCLUSIONS AND DISCUSSION

### RQ2: FEEDBACK

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- Feedback could be used more
- Not all teachers derived information about teachers' instruction and students' learning from assessments → lack of systematic inquiry may hinder instructional improvements in classroom<sup>6</sup>
- Not all teachers were focused on improving quality of instruction → teachers should *change* how they teach to meet students' learning needs<sup>7</sup>
- Teachers could improve the quality of providing feedback to students → specific feedback related to learning objectives can increase student learning<sup>4,5</sup>





## CONCLUSIONS AND DISCUSSION

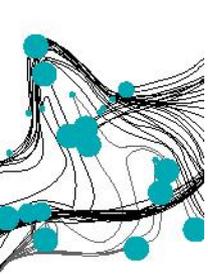
### RQ3: PREREQUISITES

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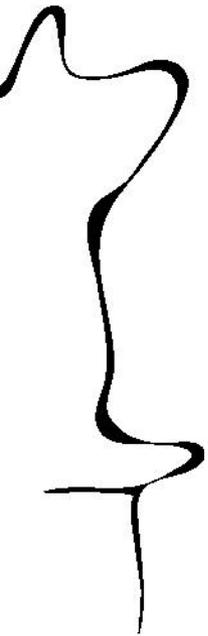
- Top five of prerequisites: positive attitude, specific feedback assessments, alignment assessments and curriculum, role school leader, and teachers' knowledge and skills to adjust instruction
- Self-perception of teachers: other prerequisites might also be important
- Professional development interventions should at least focus on these top five prerequisites<sup>5</sup>
- Important to link the prerequisites<sup>5</sup>





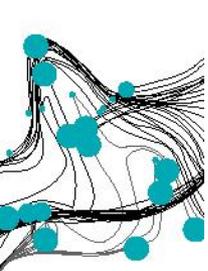
## CONCLUSIONS AND DISCUSSION

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- Professional development for teachers in use of formative assessment is crucial, in high-performing schools and in other schools.
- Further research: videotaped classroom observations, role students in formative assessment, interaction between teachers and students in using formative assessment (right side Figure slide 4)





# THANK YOU FOR YOUR ATTENTION

- Any questions?
- For the paper or for further questions please contact [w.b.kippers@utwente.nl](mailto:w.b.kippers@utwente.nl)

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