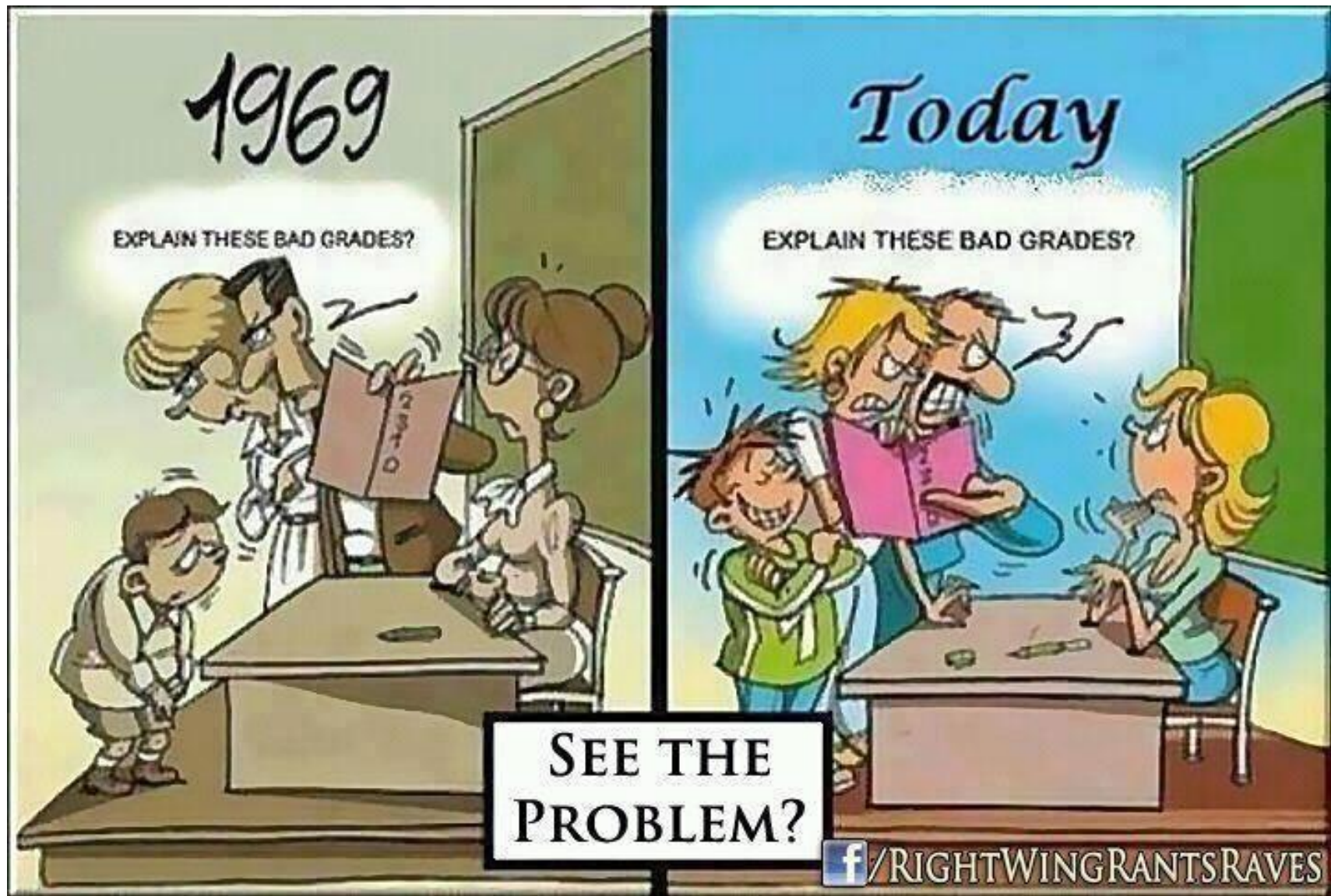
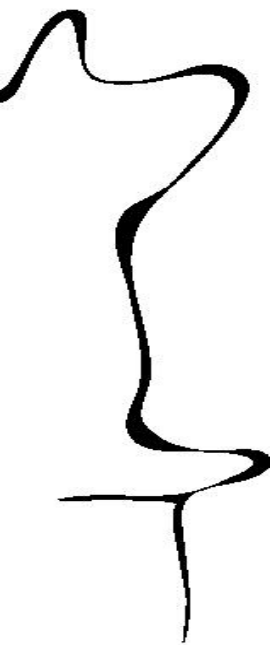
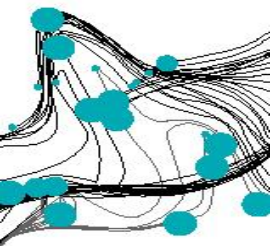


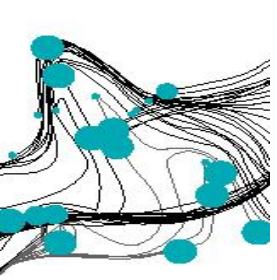
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Amsterdam 2018

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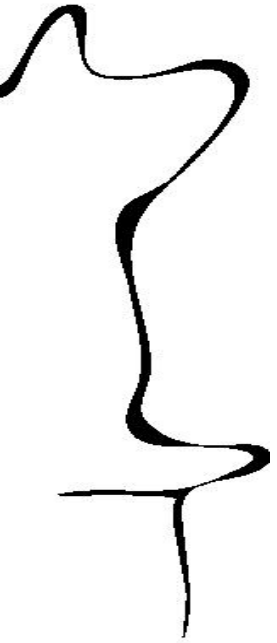
ResearchED Amsterdam January 20th, 2018
FORMATIVE ASSESSMENT IN CLASSROOM PRACTICE

Wilma Kippers
Christel Wolterinck





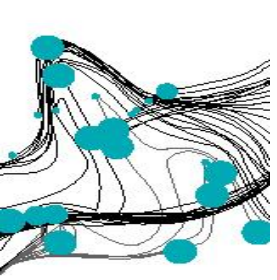
LEARNING GOALS



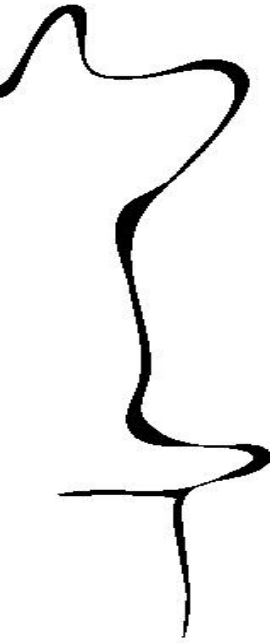
Participants:

- Have insight into the process of formative assessment.
- Have insight into the 5 strategies of Assessment for Learning.
- Know examples of how to implement Assessment for Learning in the classroom.





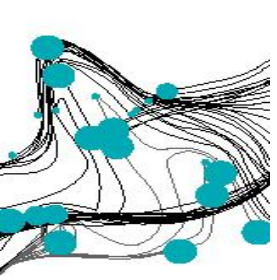
PRIOR KNOWLEDGE



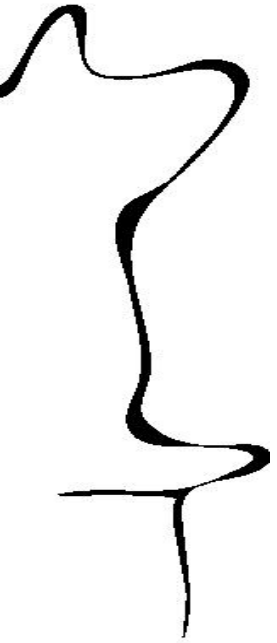
- Go to www.menti.com
- Use the code **4444**

- What do you know about formative assessment?
- Mention 3 words.





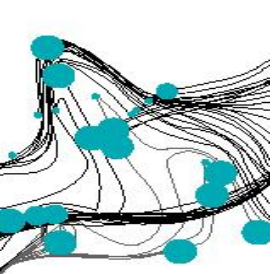
FORMATIVE VERSUS SUMMATIVE



Formative assessment can be compared with a cook who tastes the soup: focusing on the progress and process, does the soup need any supplies?

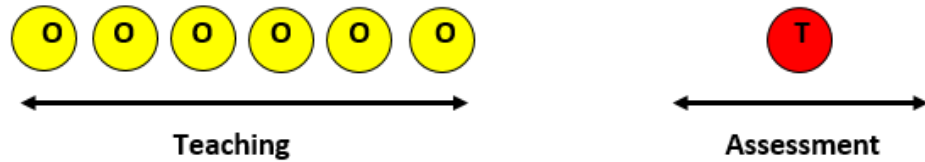


Summative assessment can be compared with a customer who tastes the soup: focusing on a judgment, is the quality of the soup sufficient?

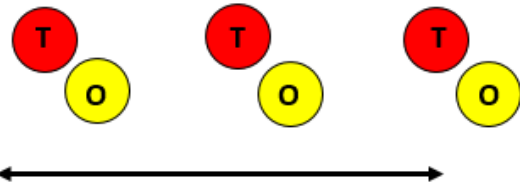


FORMATIVE ASSESSMENT

Alignment between assessment and learning



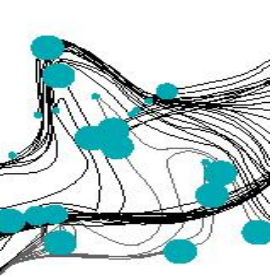
Integrating assessment and learning



Formative assessment is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there“ (ARG, 2002, p. 2)

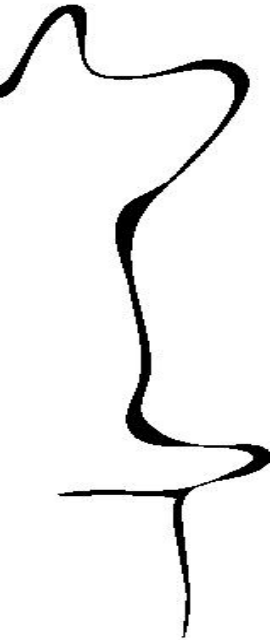
Assessment as start of the learning process!





FORMATIVE ASSESSMENT

- Definition: using assessment to obtain information about the learning process to improve teaching and learning (Bennett, 2011; Black & William, 2009).
- Why important: it can enhance student achievement (Bennett, 2011; Black & William, 2009).
- Feedback is crucial (Sadler, 1989; Van der Kleij, Vermeulen, Schildkamp & Eggen, 2015).



ASSESSMENT




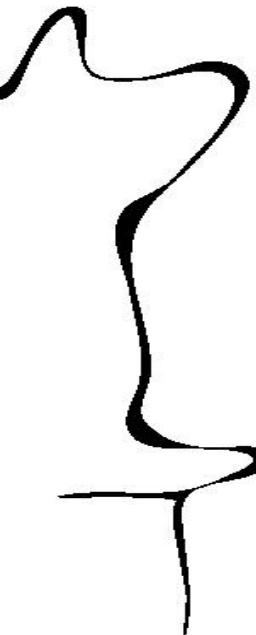
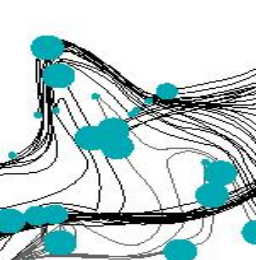
Informal information:
Collecting information on
the learning process: e.g.,
asking questions,
discussions, observations

Assessment for learning

Formal information:
Systematic collecting information
on the learning process:
e.g., assessments, exams,
structured classroom observations

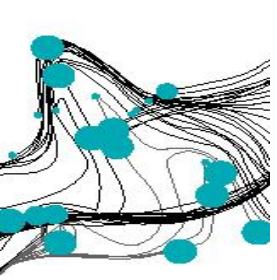
Data-based decision making

ASSESSMENT FOR LEARNING: 5 STRATEGIES



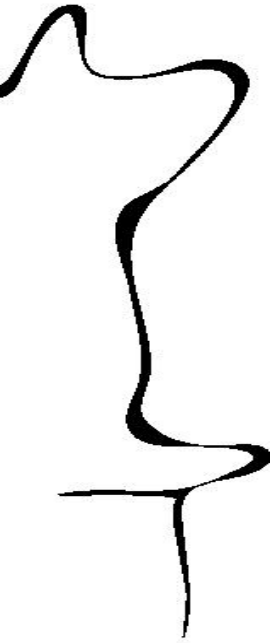
	Where the learner is going	Where the learner is	How to get there
Teacher	Clarifying, sharing and understanding learning intentions	Engineering effective discussions, tasks, and activities that elicit evidence of learning	Providing feedback that moves learners forward
Peer		Activating students as learning resources for one another	
Learner		Activating students as owners of their own learning	

Figure 1: Assessment for Learning (Black & Wiliam, 2009)



FORMATIVE ASSESSMENT IN PRACTICE

- Fill out the 'data use for instruction' and 'peer and self-assessment' scales of the questionnaire (5 minutes)
- Compare and discuss the results



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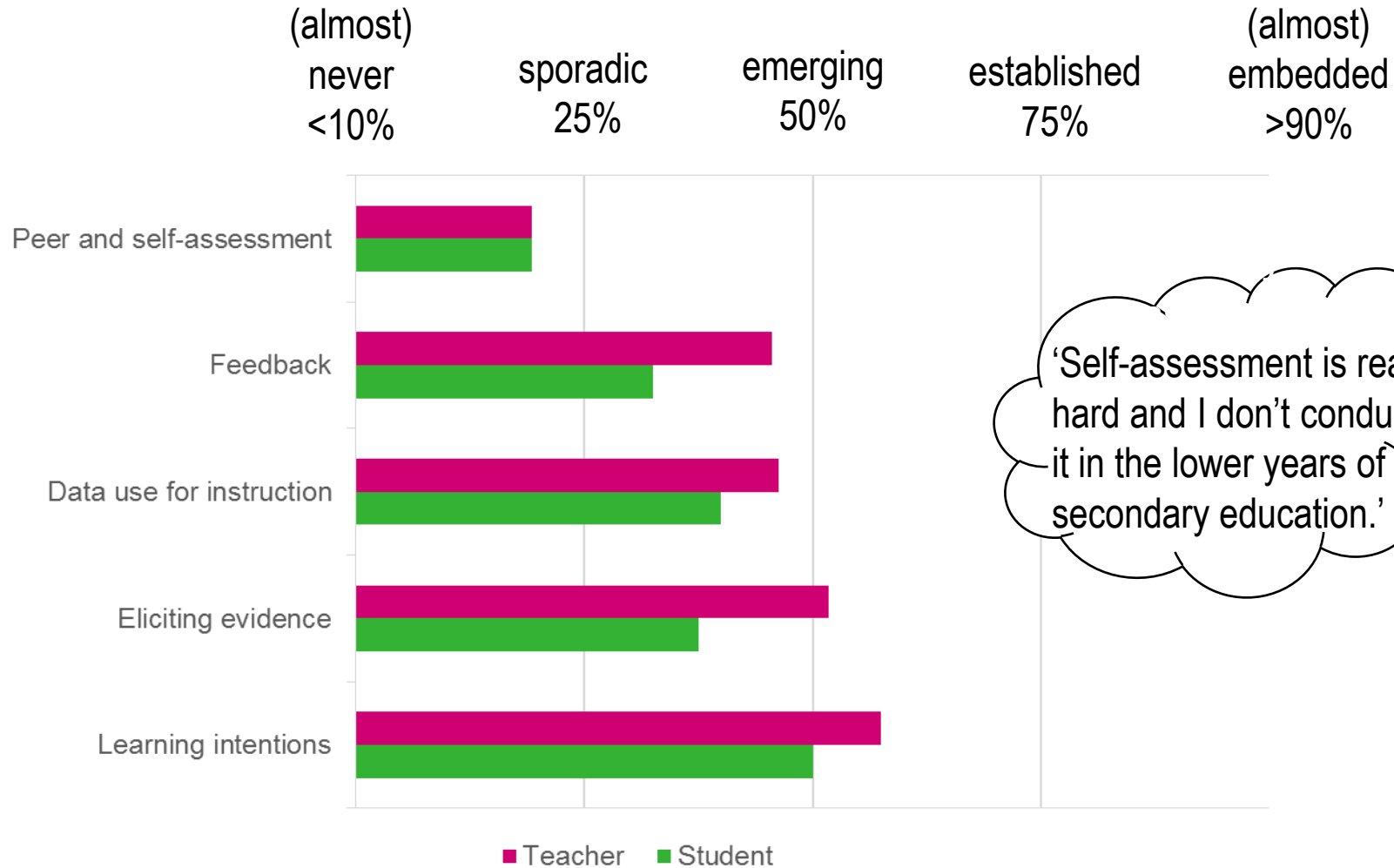
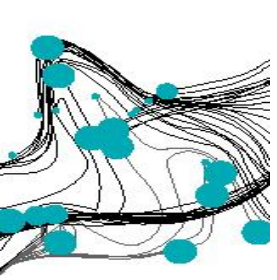
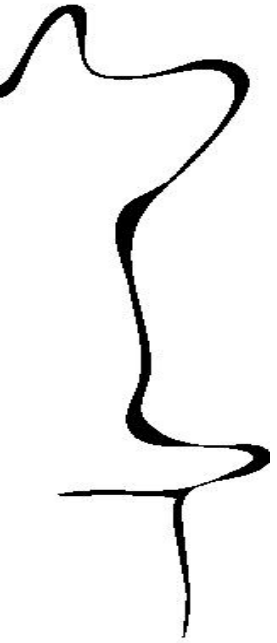


Figure 2: Use of formative assessment strategies according to teachers and students

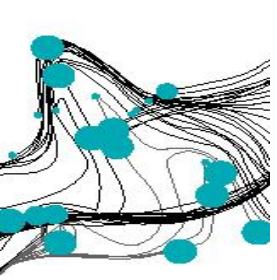


LEARNING GOALS AND SUCCESS CRITERIA (FEED UP)



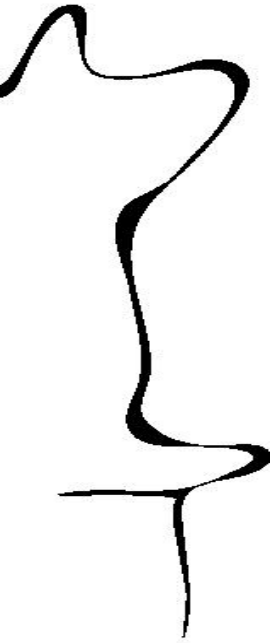
- <https://youtu.be/s6SF2tkza1Q?t=6>
- https://www.youtube.com/watch?v=JYRfURVI_TM
- “Starting with the end in mind” (Covey, 1989)
- Learning goals: What we want students to learn
 - Transfer is important
 - Starting with learning goals lesson(series)
- Success criteria: The criteria we use to assess whether learning activities were successful
 - Differentiation (e.g., more or less guidance)





ELICITING EVIDENCE OF LEARNING (FEED BACK)

<https://www.youtube.com/watch?v=PtZ1pmY0VzI>




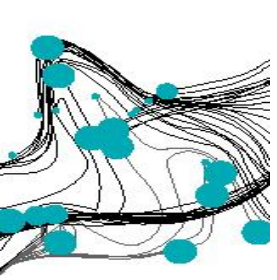
- Collecting information about what students can and cannot do to find out what students know
- Students do not always learn what we teach
- Using different types of assessment to elicit evidence (formal and informal), such as classroom conversations, asking questions, observations, paper-and-pencil tests, homework assignments





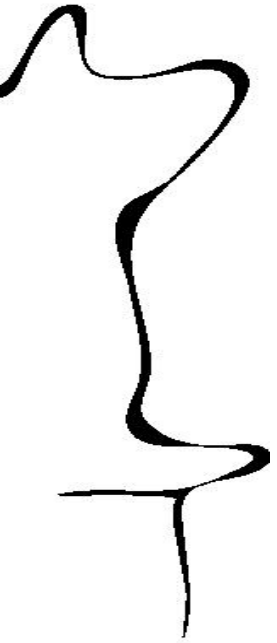
FEEDBACK/TAKING ACTION (FEED FORWARD)

- 
- https://www.youtube.com/watch?v=UG5iK7TMRuU&list=PLmFr8dtDPc_1lojlBbn_dzkJZZUOIAnfLk&index=4
 - Providing feedback to students about their learning process and progress
 - Corrective feedback: Correcting inappropriate conceptions and strategies
 - Reinforcing feedback: Telling the learner when (s)he is on the right track
 - Feedback has to:
 - Stimulate thinking (about achievement and learning)
 - Include information about where students are
 - Include information about where students need to go
 - Include information about how students get there



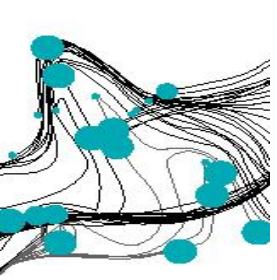
PEER ASSESSMENT

(FEED UP, FEED BACK, FEED FORWARD)



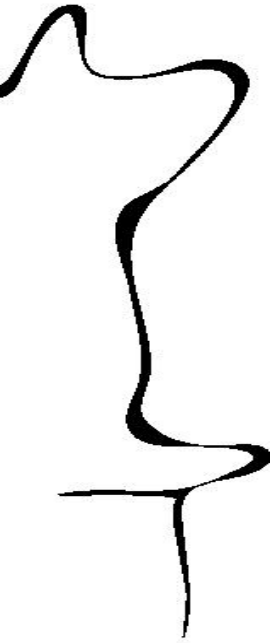
- Students as learning resources for one another
- Peer feedback: Peers providing each other with feedback (not to judge, but to improve learning)
- Cooperative / collaborative learning:
 - Clearly perceived positive interdependence: Every student has to do his/her best for the group to succeed
 - Clearly perceived individual accountability: Every student is accountable for the quality of his/her contribution
- These skills need to be trained with students: What are learning goals? How do you ask questions? How do you provide feedback?

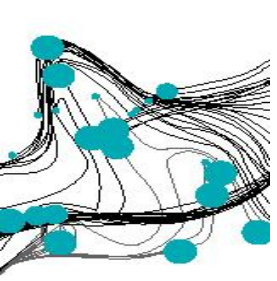




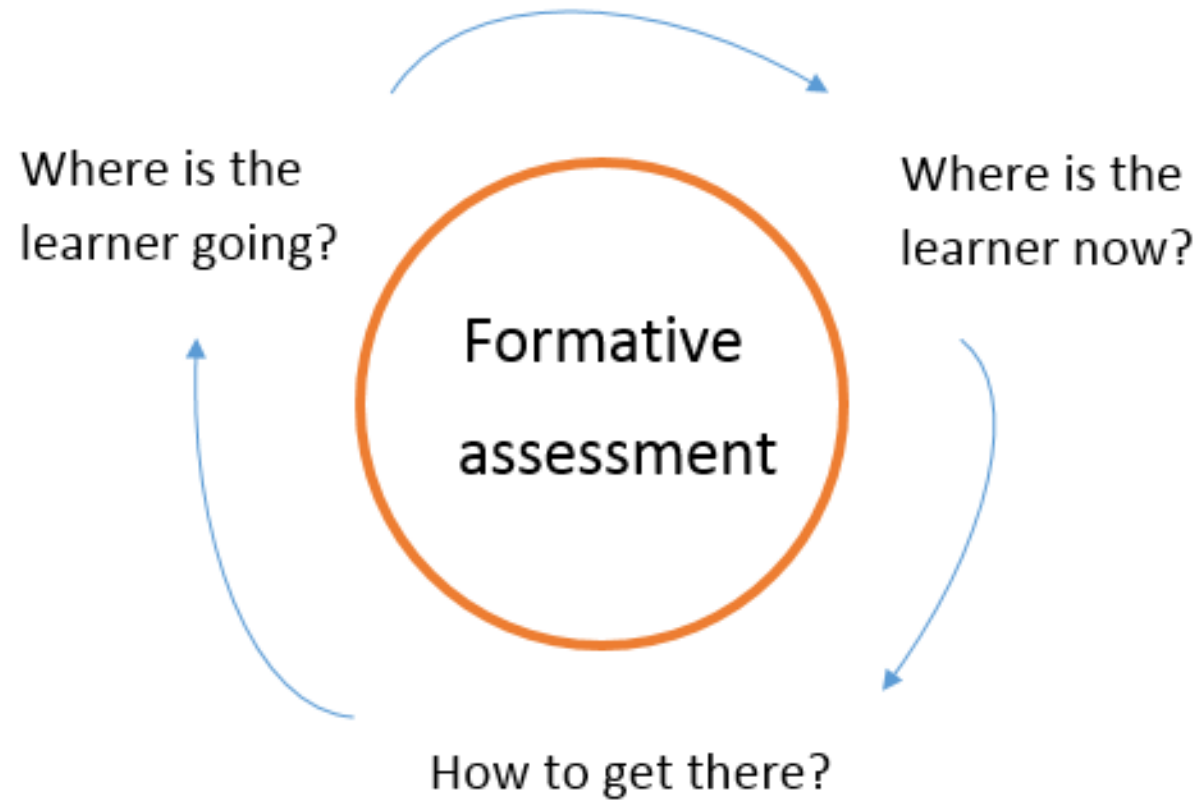
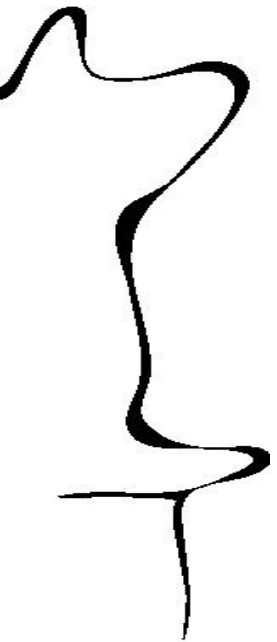
SELF-ASSESSMENT (FEED UP, FEED BACK, FEED FORWARD)

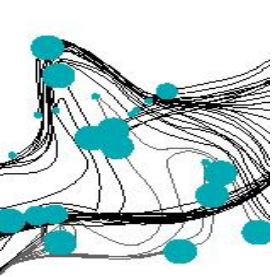
- Students are owners of their own learning
- Key factors:
 - Setting learning activities in the context of personal goals (learning goals and success criteria)
 - Connecting effort investment to success (feedback)
 - Engaging students in the planning of the work (meta cognition)





FORMATIVE ASSESSMENT CYCLE





FURTHER RESEARCH

- Professional development programs for teachers to use formative assessment (University of Twente, Maastricht University, Dutch National Expertise Center for Curriculum Development (SLO), Ministry of Education, Culture and Science, and European Commission)
 - Primary education
 - Secondary education
- Professional learning networks about formative assessment (Wageningen University & Research, HU University of Applied Sciences Utrecht, Dutch National Expertise Center for Curriculum Development (SLO), and Ministry of Education, Culture and Science)
 - Secondary education



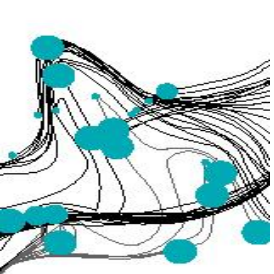
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THANK YOU FOR YOUR ATTENTION!

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c.h.d.Wolterinck@utwente.nl / c.wolterinck@marianum.nl



LITERATURE

This presentation is mainly based on:

- Kippers, W. B., Schildkamp, K., & Poortman, C. L. (2016, April). The use of formative assessment by teachers in secondary education in the Netherlands. Artikel gepresenteerd op de AERA conferentie, 10 april, Washington D.C., USA.
- Van der Kleij, F. M., Vermeulen, J. A., Schildkamp, K., & Eggen, T. J. H. M. (2015). Integrating data-based decision making, assessment for learning and diagnostic testing in formative assessment. *Assessment in Education: Principles, Policy & Practice*, 22, 324–343.
- Wiliam, D., & Leahy, S. (2015). *Embedding formative assessment. Practical techniques for k-12 classrooms*. West Palm Beach: Learning Sciences International.
- Wolterinck, C.L., Kippers, W.B., Schildkamp, K., & Poortman, C.L. (2016, April). Factors influencing the use of formative assessment in the classroom. Artikel gepresenteerd op de AERA conferentie, 9 april, Washington D.C., USA.
- Kippers, W.B., Wolterinck, C.H., Schildkamp, K., Poortman, C.L. (2016). *Strategieën voor formatief toetsen in de lespraktijk: onderzoek en concrete voorbeelden [Strategies for formative assessment in the classroom: research results and examples]*. In D. Sluismans & R. Kneyber (Eds.). *The assessment revolution*. Culemborg: Uitgeverij Phronese.

