

# DIGITAL SCAFFOLDS FOR READING IN TEACHER EDUCATION



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## CONTEXT

- Master of Educational Needs
- 2-year part-time program
- Working teachers, mean age around 40
- Two to four f2f sessions in 10 weeks
- Reliance on self-study (different sources)

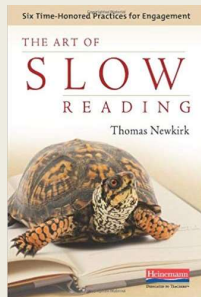
## PROBLEM

- **reading compliance** (Burchfield & Sappington, 2000; Kerr & Frese, 2017)
- **reading speed**
  - too fast 'power browse - skimming'
  - slow reading - shame
- **reading comprehension**
- **age of distraction**

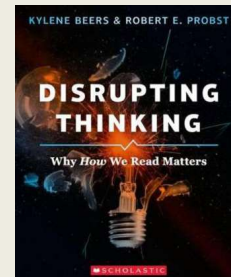
## GOALS

- **Students read regularly for professional growth**
- **Preparation for**
  - life long learning
  - teaching

## INSPIRATION




'this is NOT a race.  
Take your TIME.  
PAY attention.  
TOUCH the words and  
tell me how they touch YOU" (Newkirk 197).



## PEDAGOGICAL DESIGN OF THE INTERVENTION

- Planning: build regular reading habit
- Send regular reminders (e-mail)
- Limited choice (Guthrie & Davis, 2003) and mandatory text
  - Well written interesting text
- Scaffolding: story-curiosity
- Slow reading: intense interaction with the writer
  - Centering
  - Problem finding
  - Elaboration
- Interaction with fellow students (internet, smartphone)

## TOOLS



**PeerWise**  
Ask | Share | Learn

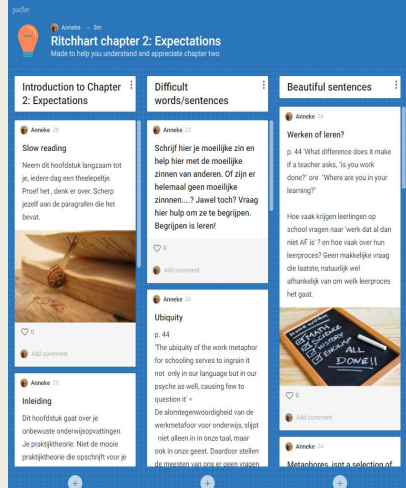
Welcome to PeerWise!

To log in, select your school / institution from the list below:

Just type the first few characters...

PeerWise supports students in the creation, sharing, evaluation and discussion of course related assessment questions, and to answer and discuss questions created by their peers.

**What is PeerWise?**  
Students use PeerWise to create and to explain their understanding of course related assessment questions, and to answer and discuss questions created by their peers.



Richhart chapter 2: Expectations  
Made to help you understand and appreciate chapter two

**Slow reading**  
Neem dit hoofdstuk langzaam tot je, iedere dag een theelepeltje. Proef het, denk er over. Scherp jezelf aan de paragrafen de het bevat.

**Difficult words/sentences**  
Schrijf hier je moeilijke zin en help hier met de moeilijke zinnen van anderen. Of zijn er helemaal geen moeilijke zinnen...? Jawel toch? Vraag hier hulp om ze te begrijpen. Begrijpen is leren!

**Beautiful sentences**  
Werken of leren?  
p. 44 What difference does it make if a teacher asks, 'Is you work done?' or 'Where are you in your learning?'  
Hoe vaak krijgen leerlingen op school vragen naar 'werk dat al dan niet AF is?' en hoe vaak over hun leerproces? Geen makkelijke vraag die laatste natuurlijk wel afhankelijk van om welk leerproces het gaat.


**Ubiquity**  
p. 44  
The ubiquity of the work metaphor for schooling serves to regrant it not only in our language but in our psyche as well, causing few to question it.  
De alomtegenwoordigheid van de werkmetafoor voor onderwijs, slipt niet alleen in in onze taal, maar ook in onze geest. Daardoor stellen de moesten iets ons er oren vragen

## QUESTIONS FOR THE CASE STUDY


- Advantages and disadvantages of the tools?
- Effect on reading and learning?

Student and teacher reflections

Quantitative data from the tools



<p><b>Disadvantages</b></p> <ul style="list-style-type: none"> <li>■ F2f Instruction and support needed to enroll</li> <li>■ Many reminders needed to start – extrinsic motivation – examples- mandatory</li> <li>■ Teacher workload</li> <li>■ Multiple choice format – lower order questions</li> <li>■ Gamification (for some students)</li> <li>■ Feels like ‘work’ for students</li> </ul>	<p><b>Advantages</b></p> <ul style="list-style-type: none"> <li>■ Feasible for large group</li> <li>■ Anonymous to each other (students)</li> <li>■ Explanations, comments, discussions</li> <li>■ Gamification (for some students)</li> <li>■ Dashboard for teacher: early identification of problems (question answering)</li> <li>■ Continuous formative evaluation</li> <li>■ Enables tailoring lessons to learning needs</li> </ul>
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padlet Ritchhart chapter 2: Expectations  
Made to help you understand and appreciate chapter two

Introduction to Chapter 2: Expectations    Difficult words/sentences    Beautiful sentences    Beautiful ideas in your own words    Feel free to ask    Extra

**Disadvantages**

- Not suitable for large groups >8 / or use different Padlets
- No Dashboard

**Advantages**

- Low threshold: easy to use
- Synchronous messages on phone (students)
- Students are intrinsically motivated to participate – social media effect
- Students encounter different perspectives
- Centering, problem finding and elaboration
- Identification of at risk students (non/low participation)
- Continuous formative evaluation
- Enables tailoring lessons to learning needs

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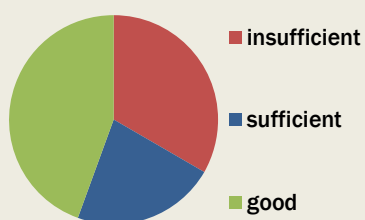
**Advantages**

- Low threshold: easy to use
- Anonymous is possible
- Synchronous messages on phone
  - Students are **intrinsically motivated to participate** – social media effect
- Students encounter different perspectives, makes them think
- Centering, problem finding and elaboration
- Identification of at risk students (non/low participation)
- Continuous formative evaluation
- Enables tailoring lessons to learning needs

## USE OF KNOWLEDGE IN ASSIGNMENT

### PeerWise N=9

#### Grades

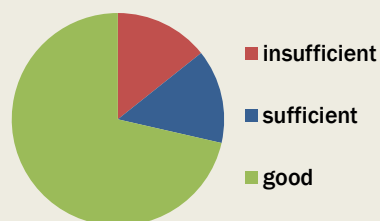


Correlation with use of knowledge

Question answering:  $\tau=0.75$   $p<0.01$

### Padlet N=8

#### Grades



Correlation with use of knowledge

Number of contributions:  $\tau=0.78$   $p<0.05$

## CONCLUSIONS

### Advantages and disadvantages of the tools

Padlet: intrinsically motivating, least disadvantages.  
PeerWise: good Dashboard, suitable for large groups.

### Effect on reading and learning?

More regular reading  
Deeper processing: slow reading - thinking about different perspectives  
Identification of non/low participation: students at risk  
Relation to learning outcomes seems positive