

## Danish University Colleges

### Strategic reading with Assistive Reading Technology eight strategies for dyslexic pupils

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# Strategic reading with assistive reading technology – eight strategies for dyslexic pupils

**Søg: ctrl f  
Kopier: ctrl c  
Sæt ind: ctrl v**

Læsemåde  
Skimme og nærlæse

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
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Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.

Oplæsning  
Ord, sætning, afsnit, hastighed

Delt skærm

Her kan du arbejde med to skærme

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.

Følg med i teksten

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.

Stop, undersøg og genlæs

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Der er også nogen, der har dyr i bur fx fugle og kaniner.

Understregning  
Ord, der skal undersøges

kæledyr • substantiv intetkøn

kæledyr  
kæledyr  
kæledyr

Betydning

1. (mindre) dyr som man har i hjemmet for at lege et, kalle med det et, for hygge og selskabs skyld (fx hund, kat, hamster et, papegøje)

Når kæledyr skammes og klappes eller overføres, kan det opleves stressende for dyret.

Tjek et ord  
Ordbog og billedsøgning

Spørg

# The background for eight technology based reading strategies

Reading



Assistive reading  
technology

## Report:

Project It and dyslexia (2016)  
*Elisabeth Arnbak and Dorthe Klint Petersen*

- Too few pupils in 5th grade use their assistive technology – why?

## Ph.D.:

Technology based reading and writing in school (2016)  
*Helle Bundgaard Svendsen*

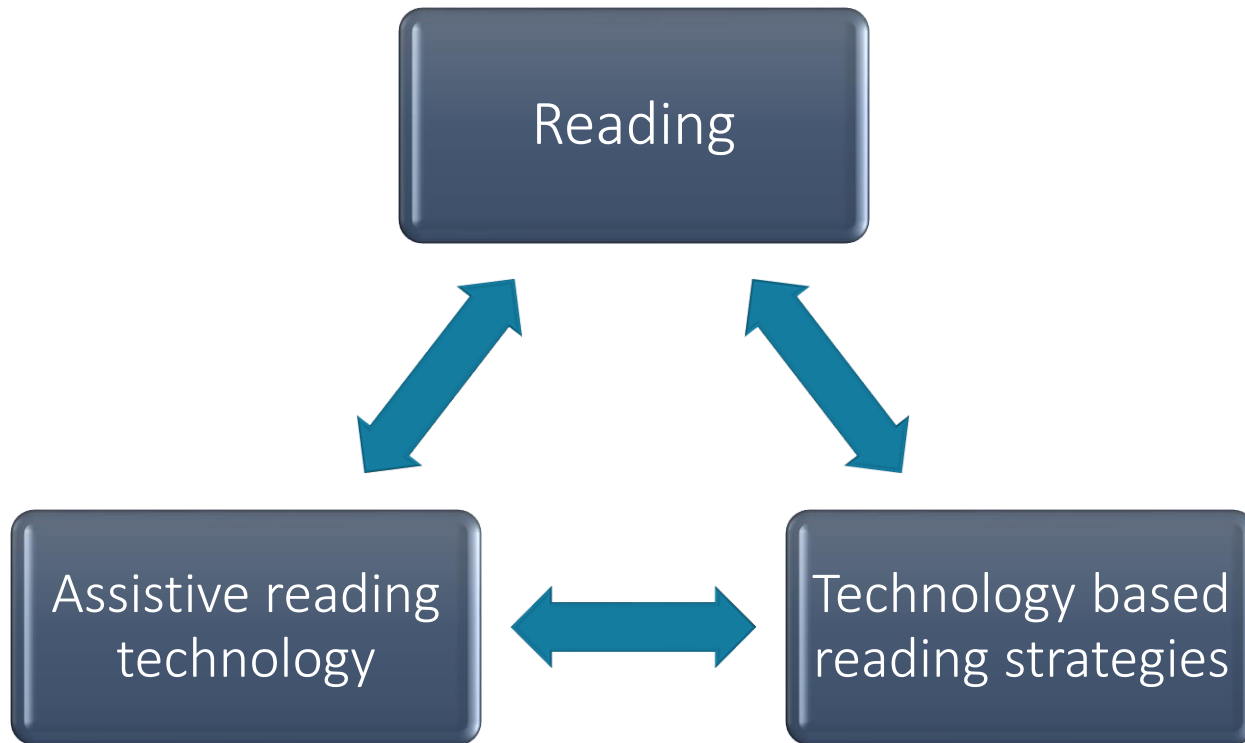
- Students' strategies for technology based reading and writing

## Project:

Strategies when reading digital professional texts (2017)  
*Signe Elmstrøm*

- Testing my hypothesis on explicit teaching in technology based reading strategies in 4<sup>th</sup> grade

# Strategic reading with assistive reading technology



Strategic reading with assistive reading technology  
*Signe Elmstrøm (2018), Thesis:*

## Hypothesis:

My hypothesis is that dyslexic pupils who receive explicit teaching in using technology based reading strategies will become more aware of their use of strategies and thereby have a more solid basis for being able to choose appropriate strategies in correlation with their own capacity, the text type and reading purpose, which leads to more effective reading.



Søg: ctrl f  
Kopier: ctrl c  
Sæt ind: ctrl v

Way of reading  
Skimming - reading closely

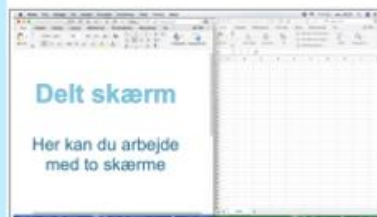
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Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.



Assistive reading  
Word, sentence, paragraph, speed



Split view

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.



Monitoring the text



Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Andre har måske fisk og marsvin.

Stop, check, reread

Mange mennesker har kæledyr.  
De fleste har hunde og katte.  
Der er også nogen, der har dyr i  
bur fx fugle og kaniner.

Underlining  
Words that need to be checked



Look up words  
Dictionary – picture search



Ask

Læs strategisk med læseteknologi af Signe Elmstrøm ©

# In Denmark



- Many schools have implemented technology
  - Computers, Chromebooks, tablets, interactive boards
- Assistive reading- and writing technology is available for most pupils
- 3<sup>rd</sup> grade (March): Screening for dyslexia if there is a reasonable suspicion
- Dyslexic pupils have a right to receive assistive technology from their school

# Reciprocal teaching

“Reciprocal teaching provides an excellent model for all strategy instruction” (Shanahan, 2005, p. 31).

“I do it-We do it-You do it” (Shanahan, 2005, p. 32).

## 6 phases in teaching technology based reading strategies

Introduction	Teacher	Introduction to the strategies
Modeling	Teacher	The teacher works with the first half of an assignment, text 1 and shows how and tells why the strategies can be used when reading digital texts.
Consolidation 1	Pupils + teacher	The pupils work together in pairs on the rest of the assignments, text 1 and have the opportunity to imitate the teacher’s approach to the strategies. The teacher sits next to pupils and observes and interferes when necessary.
Consolidation 2	Pupils	The pupils work together on a new assignment, text 2, which is similar to text 1 to repeat the strategies. The teacher acts as a counselor when needed.
Repetition	Pupils + teacher	The pupils tell each other about their use of strategies. The teacher listens and asks questions to make the pupils reflect on their learning.
Implementation	Teacher + pupils	The pupils practice their use of strategies in class over a longer period of time. The teacher must establish the right settings for implementing the strategies.

# What to do when modeling

Take the pupils' perspective: What do you think the pupils need to know to work on their own?

Ask questions while modeling to enter a dialogue with the pupils to encourage the pupils meta consciousness:

- What would you have done?
- How can you do it differently?
- What would have been a good thing to do?

Before reading	During reading	After reading
<ul style="list-style-type: none"><li>• Create an overview of the text and the assignment</li><li>• Chose a way to read that matches the text and reading purpose</li><li>• Chose how much reading aloud is needed; adjust the speed</li><li>• Split view so both text and assignment are visible at the same time</li><li>• Monitoring the text – how?</li></ul>	<ul style="list-style-type: none"><li>• Read the question; how can you find the answer in the text?</li><li>• Skim read by using the keywords from the question</li><li>• Read closely the paragraph in the text that contains the marked keyword</li><li>• Re-adjust the speed if needed</li><li>• Stop, check and reread words that either doesn't make sense or need extra attention</li><li>• Underline words that need to be examined further</li></ul>	<ul style="list-style-type: none"><li>• Check out the underlined words by using dictionary and/or running a picture search</li><li>• Ask someone who can help when needed</li></ul>



# What did my study show?

- That it's essential with explicit instructions in technology based reading strategies
- That the pupils became more aware of their use of strategies and their reading – and it takes time to adapt to new strategies
- That the implementation phase is crucial for the pupils' use of reading technology in class
- That it's important that the pupils work together
- That the teacher and the pupils learn together in the process
- That eight strategies are too many to learn at the same time and that not all the strategies are suitable for all kinds of assignments and type of texts
- That it's not possible to predict all the challenges – and that's okay
- That it's important to work on developing the pupils' self-awareness, self-efficacy (Bandura, 2012) and their approach to self-regulated learning (Zimmerman, 1990)

# You can download the strategies here (in Danish)

[https://www.ucviden.dk/portal/da/persons/signe-elmstroem-rasmussen\(2bfef195-0434-481b-933a-d63c099da1ad\).html](https://www.ucviden.dk/portal/da/persons/signe-elmstroem-rasmussen(2bfef195-0434-481b-933a-d63c099da1ad).html)

**UC Viden** Professionshøjskolernes Videndatabase

< Forsiden

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# Litteratur

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