

The Digital School & Trends in Digital Learning



Mads Bo-Kristensen
[Veile Digital Schools](#)



National Digitization Prize 2014



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The Digital School 2011-15

- Infrastructure and IT equipment
- Digital learning resources
- Digital teaching and learning methods
- Digital communication and knowledge sharing
- Leadership and management
- Competency development
- Culture



The Digital School 2011-15

- A technical rational approach
- An exploratory approach



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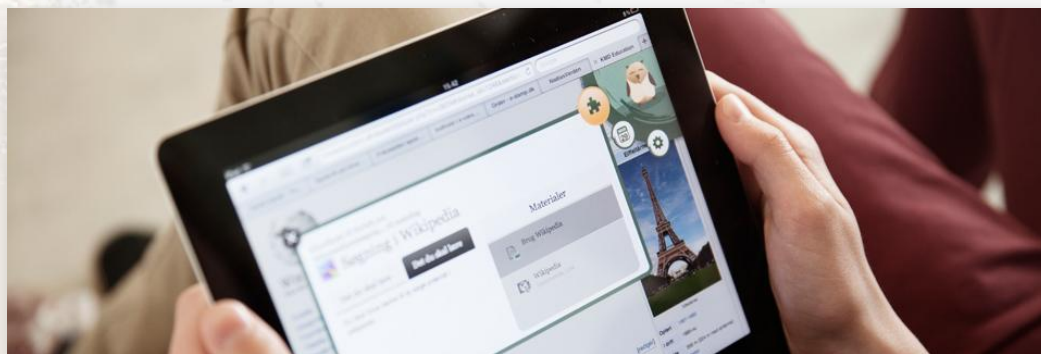
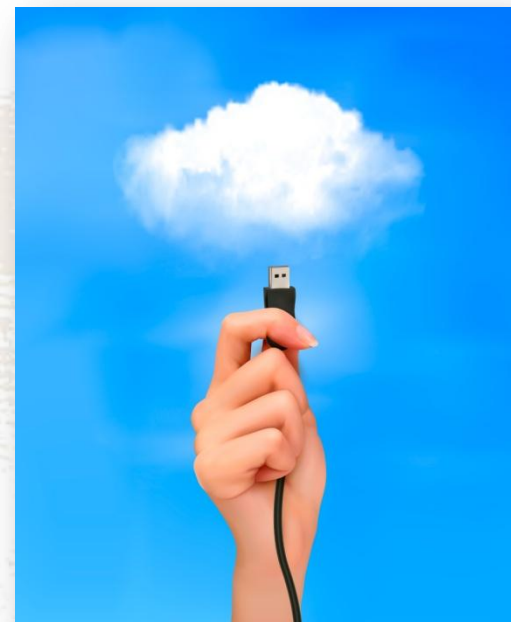
Infrastructure and It equipment

- Wifi everywhere
- Measurement May 2014:
15.000 unique devices
(pc, tablet, smartphone)
- Bring Your Own Device
- **20 large schools**
 - 70 % 4-10th grade
- **6 small schools**
 - 100 % 4-6th grade



Digital learning resources

- In "the cloud"
- All publishing houses on the web
- Ministry of Education 50% support
- Free learning resources on the web



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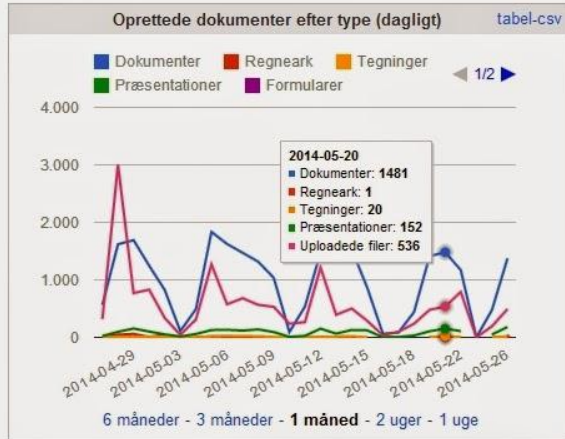
Digital teaching and learning methods



Digital communication and knowledge sharing

Google

Apps for Education



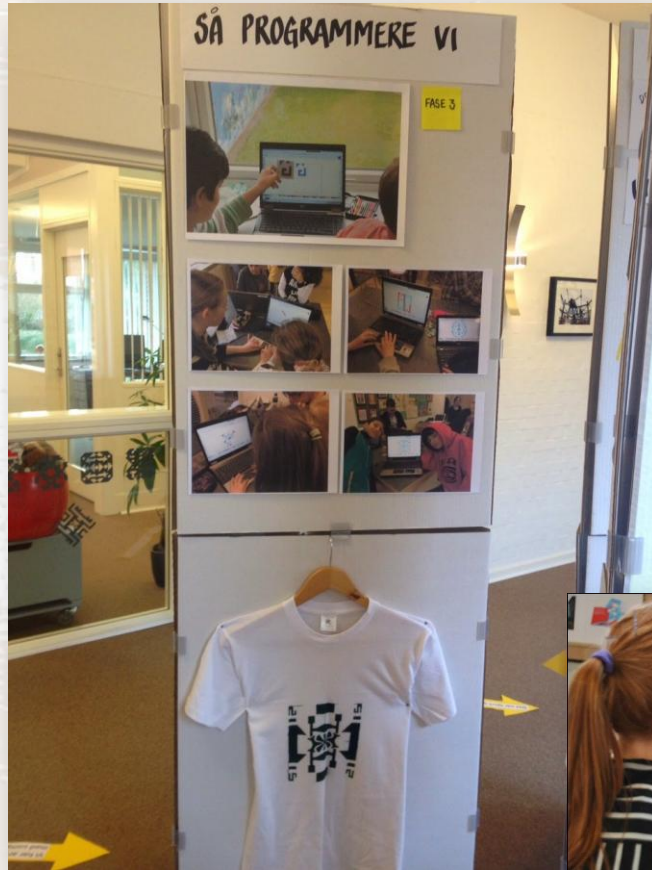
Leadership and management



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Competency development



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Next step?

Ensure continuous development of a digital culture

- Ensure that pupils from 1st-10th grade have their own computer
- Continuous teacher training
- Everyone!
- Using methods such as online platforms that support overview, planning and sharing of good practice across schools



Trends in Digital Learning

New Paths for Overcoming Reading and Writing Problems



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Overview

- Defining E-, M- and P-learning
- Examples
- Smart Learning (an example from Vejle)
- How do we learn?
- Group discussion (2 & 2)
- Three perspectives on learning
(and learning from reading and writing)
- Educational implications
- Implications for E-, M- and P-learning
 - Group discussion 1
 - Group discussion 2



How do we learn?

- We learn **alone**
- We learn **together** with others
- We learn what is **meaningful** to us



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The Digital School

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Facts Denmark

- 500.000 adults with severe functional reading disabilities
- 1.000.000 adults with reading and writing problems
- Inclusive learning 2014



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E, M & P Learning

- Electronic Learning 1998 -
- Mobile Learning 2005 -
- Pervasive Learning 2009 –



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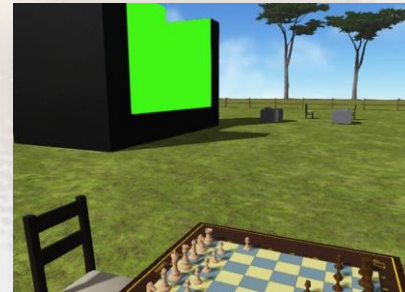
Defining E-Learning

”Individual and collaborative learning”

- Electronic Learning 1998 –
- E-mail, E-commerce etc.
- Organizing e-learning
 - Online learning **”materials”**
 - Online **communication**
- Approaches to e-learning
 - **Individual** and selfinstructed learning
 - **Collaborative** learning



Examples of E-learning

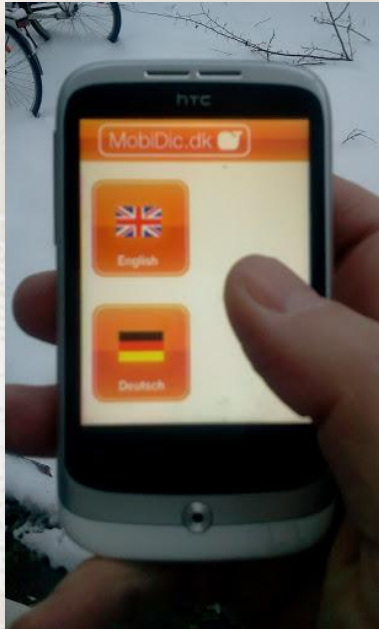


Defining M-learning

”Instruments and learning contexts”



Examples of Mobile Learning



Dansk.nu

Overzicht

Det mobile sproglab

Mobile Sproglab

- Hvordan gør jeg?
- Samtaler
- Hvad er en samtale?
- Analyseværktøjer
- Hent filmklip
- Lærervejledning

Vuggestuen

Dansk via internettet og mobilen

Du arbejder med danske samtaler fra din hverdag eller dit arbejde.

Der er 10 eksempel-samtaler. Du kan arbejde med dem via internettet og din mobil.

Du kan selv lave samtaler. Du optager samtalerne via din mobil video- eller lydoptager. Du kan lægge dem ind i Læringsrummet i Dansk.nu.

God fornøjelse!

➔ Klik på mobilens taster og vælg en af de 10 film.

<http://dansk.nu>

100 WORDS

📷 Images

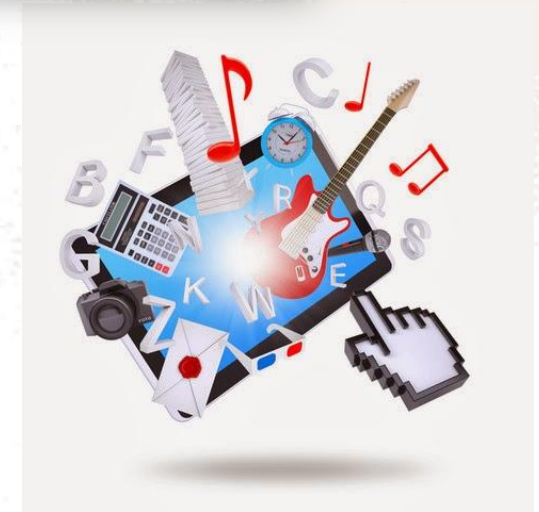
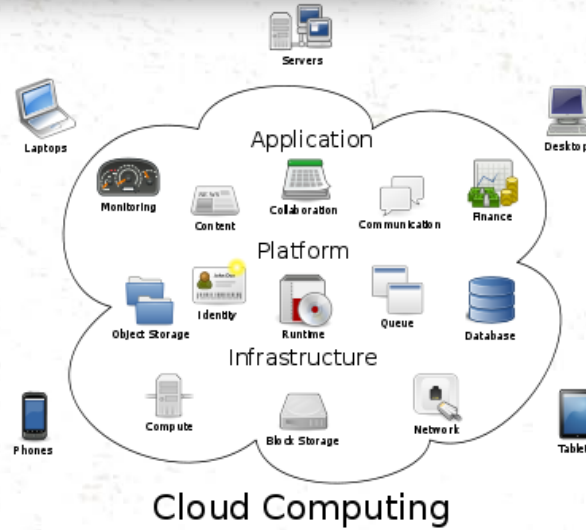
🔊 Sounds

A Words

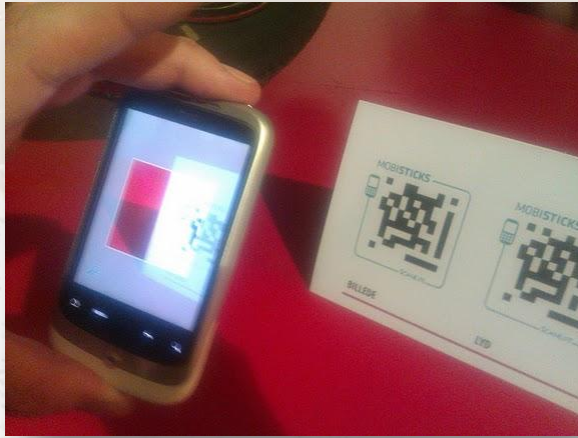


Defining P-learning

"Location Based Learning"



Examples of P-Learning

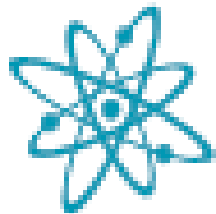


[MobiSticks at Vejle Museum](#)

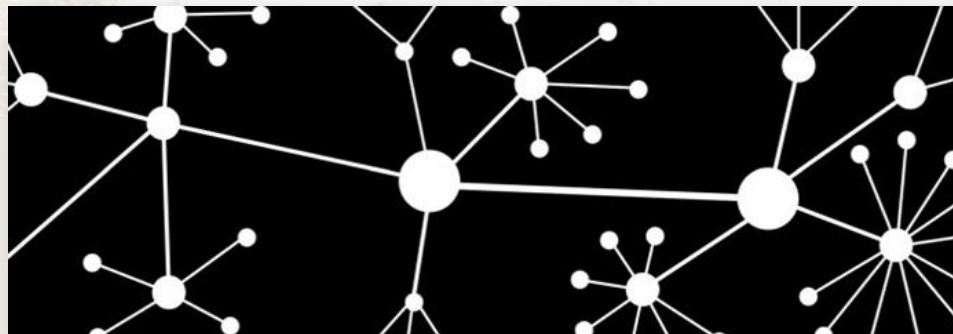
[MobiSticks at the Library](#)



Smart Learning



SMART
UNIVERSITY
VEJLE



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← → ↻ fablabatschool.dk

FAB LAB @SCHOOLdk



LABORATORIUM

NETVÆRK

OM FABLAB@SCHOOLDK

Velkommen til FabLab@SCHOOLdk



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How do we learn?

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Three perspectives on learning

- Individual learning
- Social learning
- Meaningful learning

Or:

- A **cognitive** perspective (Piaget/Illeris 2006)
- A **collaborative** perspective (Vygotsky; Lave & Wenger 1991)
- An **existential** perspective (Jarvis 2006)



Discussion (2 & 2)

- Describe an instance / a moment where you deeply learned something. Explain the individual, kollaborative and existential aspect of the instance / moment



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The cognitive perspective

- I single out a perspective
- The cognitive perspective
 - Perception and memory
- The art of separating and mixing
 - A cognitive perspective
 - A collaborative perspective
 - An existential perspective



The cognitive perspective on learning

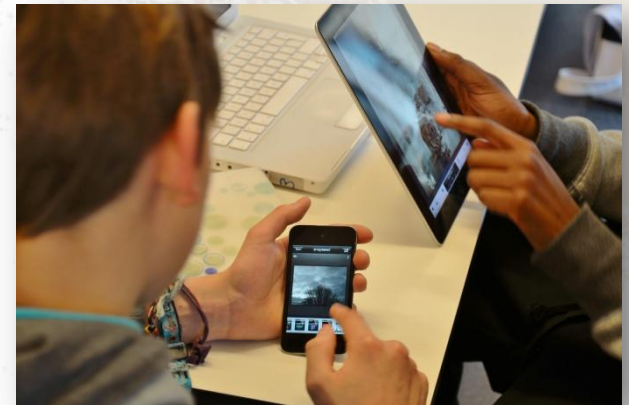
- The student already possesses knowledge, skills and values
- 'Noticing what is new'
- Using new knowledge, skills and values
- **1) Preunderstanding, 2) attention and 3) use**



How do we learn from Reading? From a *cognitive* perspective

- Three types of reading activities
- Pre-understanding ("pre-reading")
- Noticing / attention ("reading")
- Use ("post-reading")

*Reading activities with an iPad
and a mobile phone - ?*



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Group Discussion 1

- What are your experiences with mobile phones and tablets for reading and writing activities?
- How can mobiles and tablets seriously help illiterates to read and write?
- What are the barriers (societal, institutional, personal barriers), and how can these barriers be overcome?



Group Discussion 2

- From a **cognitive perspective**: How would you organize reading and writing activities with mobiles and tablets?
- From a **collabarative perspective**: How could you make these activities collaborative?
- From **an existential perspective**: How do you make activities meaningful?

