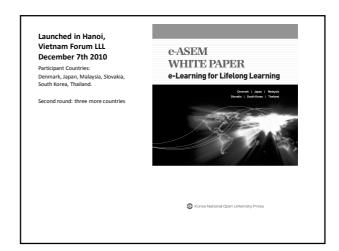
# E-learning for lifelong learning - the case of Denmark

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### General points of the white paper

- Denmark has a dual education system
  - Ordinary education system, and continuing training system
- Non-formal learning traditions have deep roots
   E.g. 'folk high schools' and adult learning associations
- Lifelong learning covers whole life
  - Children, young people, adults and senior citizens
- ICT infrastructure is well-developed
  - Many interesting initiatives are carried out; but still a broader development of educational design is needed

### The educational system in DK

- Dual structure of an ordinary educational system and an adult education and continuing training system
- In the formal system, education is free
   Primary, secondary, vocational and higher education
- In parallel system, education is financed in a mix of state funding and private payment
- High participation rate in lifelong learning activities
   29 % of adults aged 25-64 participated in education (2007)
- Programmes for funding of ICT infrastructure and ICT-based learning resources

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### Lifelong learning and e-learning concepts

- 'Lifelong learning' covers the whole life
- Traditions of liberal (non-formal) adult education, through 'folkeoplysning' ('people's enlightenment')
  - Dialogue, responsibility, participation in democracy
- Focusing on upgrading of basic skills, of social and personal development throughout life
- 'E-learning' all kinds of competence development where ICT is involved
  - It can be integrated in face-to-face teaching, net-based distance education, on-the-job peer training, or self study

### Computer and internet access

• A high number of families have computer and internet access

Percentage of households with	n computer	and inte	ernet acc	ess, 199	7-2009			
	1997	1999	2001	2003	2005	2007	2009	
		Procent af husstande						
Computer	48	60	67	79	84	83	86	
Internet	10	33	48	66	73	78	81	

- 114,7 mobile telephone subscribers per 100 people (2007)
- Internet is used for contacts with public authorities
- Almost all schools and educational institutions have broadband internet access
- The pupil-computer-ratio in schools are 1 computer of a recent date for every 4 pupils (2008)

### Characteristics

- At school level, computers, internet and interactive boards are widespread
- There is a need of developing methods of integration of ICT in specific subjects
- In higher education, distance e-learning is developed as flexible learning (mix of face-to-face & internet), with emphasis on student collaboration
- Mobile learning in adult education, e.g. language learning, or training for bus and truck drivers
- Non-formal education develops use of social media

### **Examples**

- Master's Programme in ICT and Learning (MIL)
  - A two-year part-time programme as further education
  - Based on problem-based project learning
  - Combination of big groups of students (with weak ties) and small groups (connected by strong ties)
- Museums and Public Science centres
  - Educational activities at museums, aimed at children, youth, and the public
  - Development of digital learning resources based on museums' collections

### **Perspectives**

- E-learning is not only an ICT project, but a combination of organisational, technical and pedagogical issues
- Digital technology can support learning resources where learners also are contributors
- More flexible approaches to learning may be easier to implement outside the formal system
- The design of learning processes with ICT is crucial for success of integrating ICT in lifelong learning
- An important focus is the education of teachers to integrate ICT in various modes