

'Play While Learning': IT-based Learning Methods



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Organisation: Ministry of Education, Agency for IT and Learning

Country: Denmark

Level of government: Local government

Sector: Education

Type: Digital

Launched in: 2012

Overall development time: 4 years

Link to the innovation's website

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Description

The project is a joint strategy between the government and Local Government Denmark (LGDK), involving 98 municipalities. In order to ensure efficient IT infrastructure in schools and enjoy the benefits of IT-based learning methods, participating municipalities invest in digital learning. Technology and digital learning resources provide more appealing and more interesting education for all pupils. Play while learning using digital solutions can strengthen the skills and competences of pupils while making it more fun to learn.

Why the innovation was developed

- Need to develop new teaching and learning methods in order to challenge students to reach their full potential.
 - Researches show substantial unexploited potential in the use of IT and digital learning resources in education.
 - Response to insufficient IT infrastructure and the lack of comprehensive research and knowledge on IT-based learning.
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Objectives

Improve access, Improve effectiveness, Improve service quality, Improve social equity, Support economic growth

- Increase and qualify the use of IT and digital learning resources in the public school sector.
 - Develop the market for digital learning resources to increase the supply of high quality products.
 - Ensure efficient IT infrastructure in schools.
 - Gain more knowledge on IT-based learning.
 - Support the use of IT and digital learning resources through networking and sharing knowledge on best practice.
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Main beneficiaries

Families, Government bodies, Government staff, Students, Young people

- 98 municipalities.
- 1 700 public primary and elementary schools.
- 580 000 pupils.
- 49 000 teachers.

Results

Results not available yet

- Until the winter/spring of 2014, results show time saving effects. Teachers can free up approximately 6% of their time by using digital learning resources.
- Make teaching more differentiated, thus it can respond to different user needs.
- It has positive effects on pupils' motivation.

Development

Design

The strategy is a part of the e-government strategy 2011-2015, which is a joint strategy between the Danish government, Danish Regions and Local Government Denmark. It was developed on the basis of experiences from former strategies within the area.

Testing

- Piloting: 30 schools across the country test IT-based teaching, 130 school principals develop IT-strategies and share knowledge on digital change management.
 - Approximately 600 teachers share their experience on IT-based teaching and the use of digital learning resources.
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Implementation

Tools used:

- Government grant for municipalities to buy digital learning tools.
- Research and analysis on IT-based learning and the use of digital learning resources.
- Networks for sharing knowledge on best practice.

Resources used:

- DKK 500 million from the Danish government.
 - DKK 500 million from the municipalities.
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Challenges and solutions

- There was low level of sharing knowledge on IT-based teaching methods. Therefore, networks were established to support the implementation and the diffusion of the experiences.
 - Before there was no comprehensive national research project. Now, it is included in the strategy.
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Partnerships

Rambøll Management and Boston Consulting Group

Private sector

Rambøll Management and Boston Consulting Group conducted an analysis on the effects on using digital learning resources in education.

University of Aarhus, University of Aalborg, University Colleges Denmark

Academics and Research Bodies

The above mentioned conduct the five research projects on IT-based learning. In addition, the latter carries out the networks of teachers.

The Danish Association of School Leaders

Other Public Sector

The Danish Association of School Leaders carry out the network of school principals.

Lessons Learned

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- Implementing big changes takes time. It should be accounted when planning the strategy.
 - This strategy has a holistic approach with many different initiatives. It could also have been an option to implement one initiative at the time (e.g. starting with the infrastructure).
 - In a joint public sector initiative involving the municipalities, both levels need to agree on the strategy which can prolong the decision making process. Cross public sector collaboration is considered crucial for achieving results in this area.
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Conditions for success

- Local ownership in the municipalities and in the schools is crucial in order to guarantee the successful implementation.
 - Initiatives to support the implementation and help the partners involved to carry out the changes.
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Other information

It is important to notice that the implementation of the strategy runs until the end of 2015.

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