

NIFU

Nordic Institute for Studies in
Innovation, Research and Education

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Trends in education reforms and initiatives to link research-based knowledge and practice in the Nordic Countries

A systematic mapping

Introduction: Background

Denmark: Chair of Nordic Council of Ministries in 2015



Disposition

- Introduction: Background
- Main objectives and core definitions
- Method: Systematic mapping
- Results
 - Country descriptions: Education reform trends and “knowledge brokering initiatives”
 - Country comparison: Similarities and differences in education reform trends, knowledge brokering initiatives, and use of these initiatives by practitioners
- Conclusions

Main objectives: a systematic map and description of

- I. Trends in education reforms *within* and *between* the five Nordic countries
- II. Knowledge translation initiatives («formal knowledge brokering agencies») in the five Nordic countries
- III. Knowledge on the *use* of these initiatives in terms of how and to which degree

Core definitions and conceptions

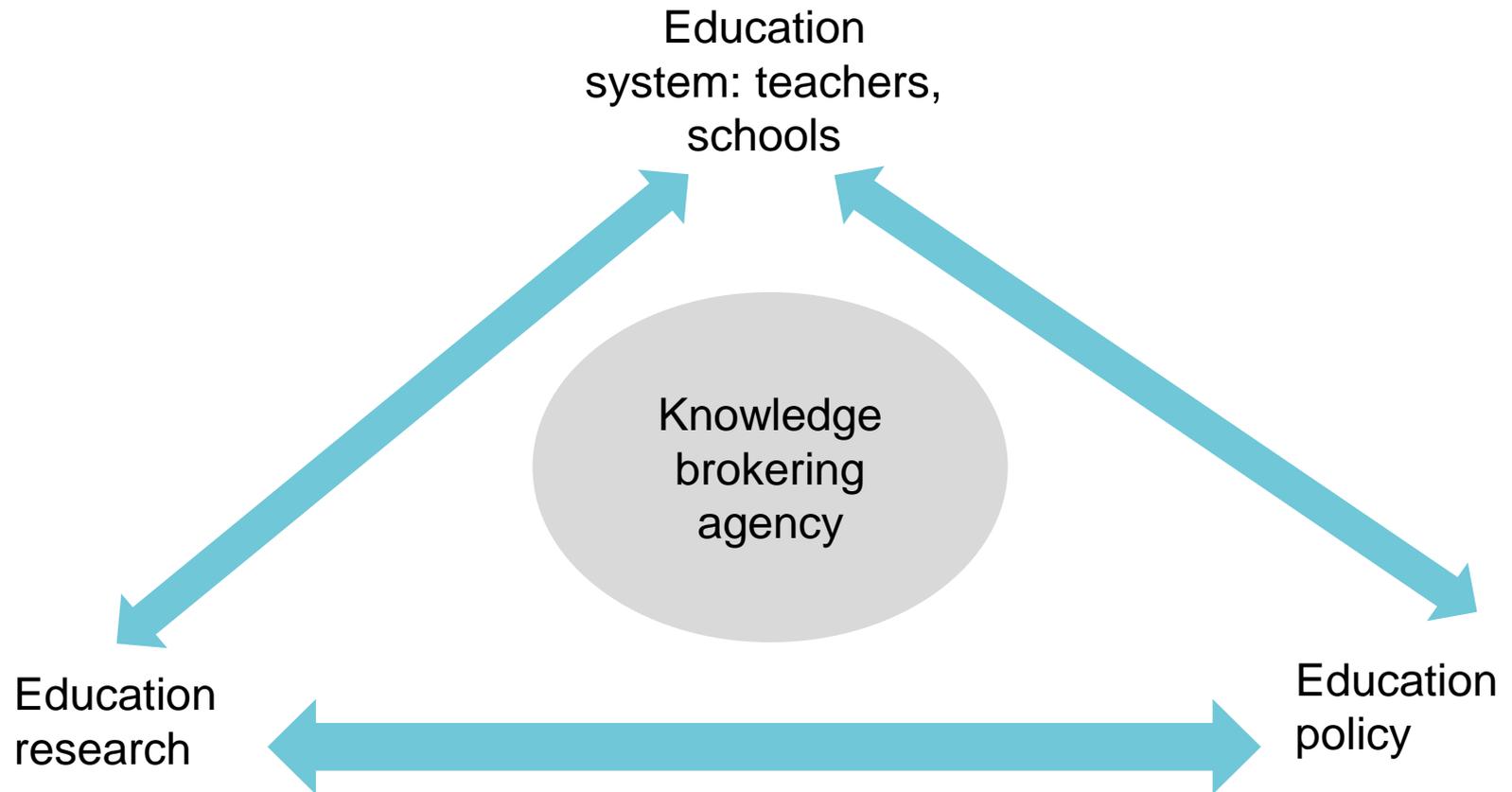
● «Knowledge brokering initiatives»

- synonyms: knowledge brokerage agencies, knowledge translation agencies/initiatives
- systematic research synthesis, dissemination and communication of research to different audiences, e.g., policy makers, and practitioners
- translate and mediate research-based knowledge to decision makers and practitioners.

● Typologies of knowledge brokering agencies

- organization or localization (higher education institutions, government bodies, independent agencies, network)
- Addressing different audiences: researchers, policy makers, practitioners
- «formal» vs. «informal», i.e., more fragmented initiatives

Core definitions and conceptions (2)



Method: Systematic mapping

● Inclusion criteria:

- Larger education reforms, education strategies, small-scale reforms (e.g., legislation, parts of education system), current issues on the political agenda
- ISCED 0-2 (early childcare and education and compulsory education)
- Documents published in English, Danish, Norwegian and Swedish
- Knowledge translation agencies (syn.: «formal brokerage agencies»)

● Sources:

- Websites of national policy education authorities (e.g., ministries, directorates)
- Main policy documents (in Norwegian, Swedish and Danish)
- English sources: OECD (2015): Education Policy Outlook 2015. Making Reforms Happen; Eurydice: Ongoing Reforms and Policy Developments. Country Reports
- Country experts related to directorates or knowledge translation initiatives

● Analysis:

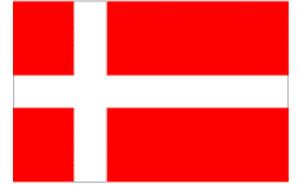
- Inspired by document analyses technique. Sample of documents: brief descriptions and strategy documents.

Main results: Country descriptions



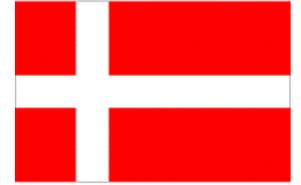
Main results: Country context

Country	Inhabitants (millions)	Number of pupils in ISCED 1-2; ECE	Compulsory education; age	School choice
	5.5	710 518	10 years, including 1 year in pre-school	can apply for a school in another municipality
	5.5	543 000 60 000	10 years 6-16	can apply for a school in another municipality
	0.320	43 000 20 000	10 years, including 1 year in pre-school 6-16	parents can apply for home instruction in their municipality
	5.2	620 000 290 000	10 years 6-16	
	9.1	950 000 114 000	9 years 7-16	Free choice of school (public and free schools)



Danmark: Main reforms

- 2013: Folkeskolereform
- 2013: Teacher education
- 2012: Inclusion of students with specific needs
- 2010: Language assessment



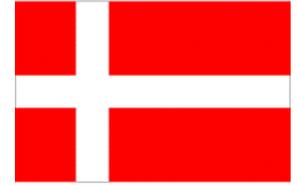
Danmark: Current issues

● ISCED 0 (Early childcare and education)

- Strengthening the quality in ECC (reform draft: 2016-19) including several elements: professionalization of staff, increasing quality for the youngest, improving well-being, facilitating transitions
- Use of digital tools in ECC

● Folkeskolen

- Increasing motivation to learn
- Increasing quality in teaching and learning in Danish and mathematics



Danmark: Knowledge brokering initiatives

- **Research institutes/ centres**
 - Danish School of education (Danmarks institut for Pædagogik og Uddannelse, Aarhus Universitet)
 - Danish Clearinghouse (Dansk Clearinghouse for Uddannelsesforskning)
 - Schooling and Education and SFI Campbell (SFI Campbell – Afdeling Skole og Uddannelse)
 - Research Center for Early Childcare and Education (Forskningscenter for daginstitutioner)
 - National Centre for Reading (Nasjonal vitenssenter for lesing)
- **(Inter) Government bodies**
 - Resource Centre for Folkeskolen (Ressourcecenter for Folkeskolen)
- **Hybrids**
 - Danish Evaluation Institute (Dansk Evalueringsinstitut)
 - National Centre for Science Education (Nationalt center for undervisning i natur, teknik og sundhed)
- **Portals**
 - The Danish Learning Portal (Vidensdeling via EMU – Danmarks læringsportal)
- **University colleges (teacher education)**
 - For eksempel: Metropol, University College UCC, VIA



Finland: Main reforms and current issues

- 2012-2016: Reform of general education
 - 2014: National Core Curriculum
 - 2016: ongoing work with local curricula

- 2013-2015: Early Childhood education
 - 2015: New law: regulation between share of adults/ children; participation in pre-school is compulsory for all 6-year-olds
 - 2013: ECEC under the Ministry of Education and Care

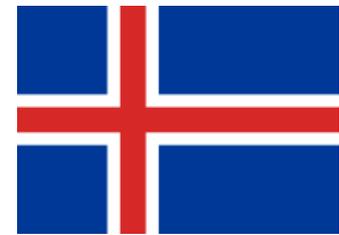
- 2010-2016: Teacher education

- The Reform of general education in Finland
 - «hot topic» on the national and international policy agenda
 - Focus: joy of learning, students active participation in learning, positive learning experiences



Finland: Knowledge brokering agencies and research-based practice

- Finnish Institute for Educational Research, University of Jyväskylä
- LUMA Centre Finland, University of Jyväskylä
 - 11 centres or single institutions located at different universities
- Finnish Education Evaluation Centre (FINEEC)
 - Central unit for evaluation at national level
 - Support to universities and education institutions to conduct evaluations
- Center for Educational Research and Academic Development in the Arts (CERADA)
- Teacher education
 - «systematic integration of scientific educational knowledge...and practice ...that enables teachers to enhance their ... evidence-based decision making, and engagement in the scientific community of education (Sahlberg, 2012: 6)



Island: Main reforms and current issues

● Current issues

- A larger education reform (White paper on education reform, 2014)
- Increasing focus on creativity, diversity and physical education and health in education

● 2014-2018: Reading skills reform (ISCED 0-2)

- Target: 90 percent of all pupils meeting minimum reading standards (of a certain level) in 2018

● 2011-2013: Revision of national curriculum guidelines

- Core issues: 1) Literacy in broad terms, 2) democracy and human rights, 3) equality, 4) education for sustainability, 5) creativity, 6) welfare and health

● 2011: Teacher education

- New law of teacher education: increased standard for teachers (at all levels) from 2011: master degree; no obligation for teachers to update old certifications
- 2008: Free choice of schools (in many large municipalities)

● 2008: New education law



Island: Knowledge brokering agencies

- Research centres, School of Education, University of Iceland
 - 21 research centres related to different fields (e.g., inclusive education) to increase and strengthen research across different disciplines
 - Their role is to initiate and conduct research, knowledge brokering and dissemination
- Newly established Directorate of Education (October 2015)
 - Providing support services for the education system, collecting data on the education system, strengthening quality assurance and assessment, and providing evidence-based reporting.



Norway: Policy reforms and current issues

- **Teacher education and teacher professionalization**
 - Several strategy documents addressing further education and training of teachers, increasing standards of teacher education, and introduction of master degree for teachers in language and mathematics
- **Increasing focus on science, math and learning**
 - Teacher education: further training and development related to maths and science
 - Targeting pupils
- **Early childcare institutions and staff**
 - To strengthen the quality in early childcare institutions by facilitating in-service training, recruitment of an increased number of pre-school teachers and staff with adequate competencies
 - 2015: Individual right for 20 hours early childcare of no charge (for low-income families)
 - 2012: Inclusion of early childcare institutions in the portfolio of the Directorate of Education



Norway: Knowledge brokering agencies

- **Research institutions and National Centres of Education**
 - Ten national centres in education related to ten core domains, i.e., reading, writing, diversity in education, mathematics, science, arts and culture
 - Center of Research in Education, University College, Bergen
 - Norwegian Center for Child Behaviors Development
- **Inter Government Bodies and**
 - Knowledge Center for Education, established in 2013
 - Research Programs (Norwegian Research Council)
- **Portal**
 - Utdanningsforskning.no: collection of research (ISCED 0-2) addressing teachers and staff in early childcare institutions

Sweden: Policy reforms and current issues



- School development: three large strategies
 - 2016-2019: Strengthening the quality for newly arrived pupils with minority language background
 - 2015- : Cooperation with school leaders to improve student achievement in low achieving schools
 - 2015-2017: National strategy for school development, addressing schools and school leaders
- Teacher education and teacher professionalization
 - 2015: teacher certification, since 2015 only certified teachers can grade pupils and regular employment
 - 2013-2018: Further education and training for teachers (skills development) addressing in-service training in mathematics (2015), literacy and science
 - 2013: Career development reform: two new career paths: senior master and lead teacher; salary increases for professionally skilled teachers
- Preschool becomes part of education (2011)
- Discussion upon a large national education reform strategy

Sweden: Knowledge brokering agencies



- Education act (skollagen, Kap. 1 § 5): all instruction should be research- and knowledge-based
- National Centres in Education
 - Five national centres, located at different universities, covering five core domains: mathematic, physics, chemistry, biology, and science and technical science
- (Inter) government bodies
 - The National Office for Knowledge and Research, Swedish National Agency for Education
 - Swedish Centre for Educational Research, established in 2015

Main results: Country comparisons



Results: Main reform (trends) in the Nordic countries

	ISCED 1-2		ISCED 0
Country	School/ Curriculum	Teachers	ECE: Curriculum
	Reform Folkeskole (2013)	Teacher education (2013)	Language assessment for 3-years olds (2010)
	Tomorrow's comprehensive school (2014-2016)	Teacher education and school staff (2010-2016)	Tomorrow's comprehensive school (2014-2016)
	Reading (2014- 2018) Education system (2011)	Teacher education (2011)	Reading (2014-2018) Education system (2011)
		Professional development (2016- 2025) School development (2013-2017)	Strategy – Facilitating in-service training and professionalization (2014-2020)
	New curricula (2011)	Teacher education and professionalization	Pre-school part of education (2011)

Results: A map of knowledge brokering initiatives

	Name	Primary target groups
	1 Danish School of Education, DPU	Authorities; practitioners in further training and education
	2 Danish Clearinghouse	Authorities; practitioners
	3 Schooling and Education and SFI Campbell	Policy makers; practitioners
	4 Research Center for Early Childcare and Education	Researchers; policy makers; practitioners
	5 National Centre for Reading	Teachers; mentors
	6 Resource Centre for Folkeskolen	Authorities; learning consultants
	7 Danish Evaluation Institute	Authorities; schools
	8 National Centre for Science Education	Municipalities
	9 The Danish Learning Portal University colleges (Metropol, UCC, VIA)	Teachers; other pedagogical staff Teacher students; teachers in further and continuing education
	1 Finnish Institute for Educational Research	Researchers; decision makers; teachers and other pedagogical staff
	2 LUMA-Centres, Finland	Teachers; other pedagogical staff
	3 Centre for Educational Research and Academic Development in the Arts	Teachers; researchers
	4 Finnish Evaluation Centre	Authorities; education institutions
	1 Research centres (21), School of Education	Researchers; policy-makers and decision-makers, teachers
	2 Directorate of Education	Policy-makers; authorities; practitioners
	1 The National Centres of Education	Teachers; other practitioners
	2 Center of Research in Education, Bergen	Politicians; other decision-makers; researchers; user-groups
	3 Norwegian Center for Child Behaviors Development	Schools; parents
	4 Knowledge Center for Education	Policy-makers; researchers; authorities; practitioners
	5 Research Programs (Norwegian Research Council)	Researchers; practitioners
	6 Portal: utdanningsforskning.no	Teachers; other pedagogical staff
	1 National Centres	Teachers; Other pedagogical staff
	2 The National Office for Knowledge and Research	Teachers; Other pedagogical staff
	3 Swedish Centre for Educational Research	Authorities; practitioners

Conclusion

- Similarities and differences across the Nordic countries in terms of education policy trends
- Differences in the map of knowledge brokering initiatives
 - Many initiatives in Denmark and long tradition in evidence-informed policy
 - Finland: long tradition for high qualified teachers and involving teachers in research
 - Sweden: evidence-based practice defined in education law
- Limited information of the *use* of knowledge brokering initiatives
 - in terms of «how» and «how much»
 - Examples: Norway: Evaluation of The National Centres of Education indicated that they are used more by schools compared to ECE
 - Sweden: Web analyses show that syntheses of research-based knowledge are used by practitioners (number of downloads) in school settings.
 - In general: Limited research on *how* research based knowledge is used by practitioners and policy makers (see Tripney, Kenny & Gough 2014).

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