

Master course in Nordic Vocational education and didactics

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Comparative analysis and methodological concerns

- Different aims of comparing education
- Some methodological challenges in comparisons
- Comparing indicators or comparing system?
- Methodological approach of the Nord-VET project



Frafall i utdanning for 16–20 åringer i Norden

TemaNord 2010:517

© Nordisk ministerråd, København 2010

Ungdomars väg från skola till arbetsliv

– nordiska erfarenheter

Jonas Olofsson & Alexandru Panican (red.)

hybrid qualifications: structures and problems in the context of european vet policy

thomas deissinger,
josef aff, alison fuller &
christian holms
jorgensen (eds)

peter lang



Tradisjonelle utfordringer – fornyet interesse

Hvordan er de nordiske landes yrkesutdanninger i stand til å møte arbeidslivets behov?



from the Nordic countries

An example: comparing drop-out rates in the Nordic countries

Table 6.2: Completion, early leaving and drop-out rates for the Nordic countries

		Denmark	Finland	Iceland	Norway	Sweden
Upper secondary graduation rates						
< 25 year-olds	2011	79.4	85.0	70.4	77.7	75.4
≥ 25 year-olds	2011	10.2	11.0	17.4	11.8	0
Total		89.6	96.0	87.8	89.5	75.4
Early school leavers						
(Eurostat)	2007	12.9	9.1	23.2	18.4	8.0
	2012	9.1	8.9	20.1	14.8	7.5
School drop-outs	2009	14.2	9.7	55.2	20.3	7.4
(OECD scoreboard for youth)						

The Nordic model – challenged but capable of reform Tarmo Valkonen and Vesa Vihriälä (eds.)
 TemaNord 2014:531 © Nordic Council of Ministers 2014

Eifred Markussen (Red.) *Frafall i utdanning for 16–20-åringer i Norden*
TemaNord 2010:517 Nordisk ministerråd, København 2010

- Drop-out is no consistent concept in the Nordic countries
- Drop-out is defined differently in the Nordic countries
- When do you start measuring: at birth, by completion of compulsory school, or by start of upper secondary education?
- When do you stop measuring: five years after completion of compulsory school, by the age of 25 years or 40 years?

Drop-out project in Denmark:

Drop-out is a statistical category, that covers many very diverse strategies and life courses of young people:

- Testing of personal interests in educational programmes
- Obtaining a pause to make up what you want with your life.
- Waiting to get access to another education



Average drop-out rates in technical colleges in Denmark

Institution (listet alfabetisk)	Number of students	students drop-out	Drop-out rate
Bornholms Erhvervsskole	233	94	40,3
Dansk Center for Jordbrugsuddannelser	428	174	40,7
Djurslands Erhvervsskoler	264	129	48,9
Erhvervsskolen Nordsjælland	1317	462	35,1
Erhvervsskolerne Aars	236	80	33,9
EUC Lillebælt	381	213	55,9
CEUS	946	489	51,7
EUC Lolland	159	111	69,8
EUC Midt	665	583	54,7
EUC Nord	920	338	36,7
EUC Nordvest	543	218	40,1
EUC Nordvestsjælland	907	387	42,7
EUC Ringsted	209	80	38,3
EUC Sjælland	1484	644	43,4
EUC Syd	1747	817	46,8
EUC Vest	1589	634	39,9
HANSENBERG	1397	668	47,8
Holstebro Tekniske Skole	1059	389	36,7
Hotel- og Restaurantskolen	1097	520	47,4
Kold College	731	323	44,2
Københavns Tekniske Skole	3763	2427	64,5
Odense Tekniske Skole	2428	1103	45,4
Randers Tekniske Skole	899	347	38,6

What is being compared here?

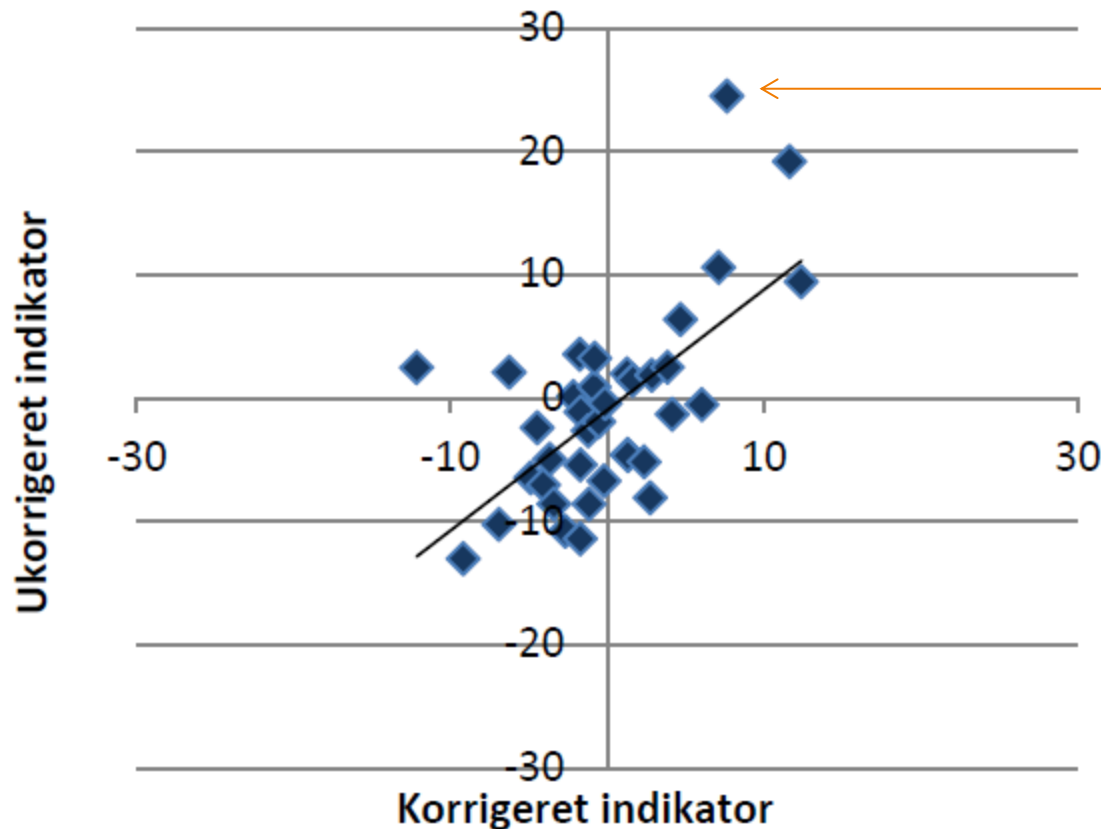
The performance of vocational school in retaining students?

Or differences in the social background of the students?



Relation between uncorrected and corrected drop-out rates in Technical schools

Figur 3.1 Relation mellem ukorrigeret og korrigeret indikator for de tekniske skoler



This vocational school
Has high drop-out rate,
but when corrected for
The background of students
it has a low drop-out rate

1. Governance: *Governing education by numbers*

Marketization as the key comparative device in standardization and convergence in education.

- EU soft governance (*Open Method of Coordination*) and OECD reviews of education and recommendations.
- In the marketplace for education everything is compared by a one-dimensional output measure – equivalent to economic value.
- *Rating* by measuring indications of performance (output)
- Education as goal rational activity (production of qualification and skills)
- Focus on *efficiency* - hides the question of the *purpose* of education

OECD Publishing

International Summit on the Teaching Profession

Schools for 21st-Century Learners

**STRONG LEADERS, CONFIDENT TEACHERS,
INNOVATIVE APPROACHES**

Andreas Schleicher



2

Implementing highly effective teacher policy and practice

Improve the societal view of teaching as a profession



Recruit top candidates into the profession



Developing Teaching as a profession

Retain and recognise effective teachers – path for growth



Support teachers in continued development of practice

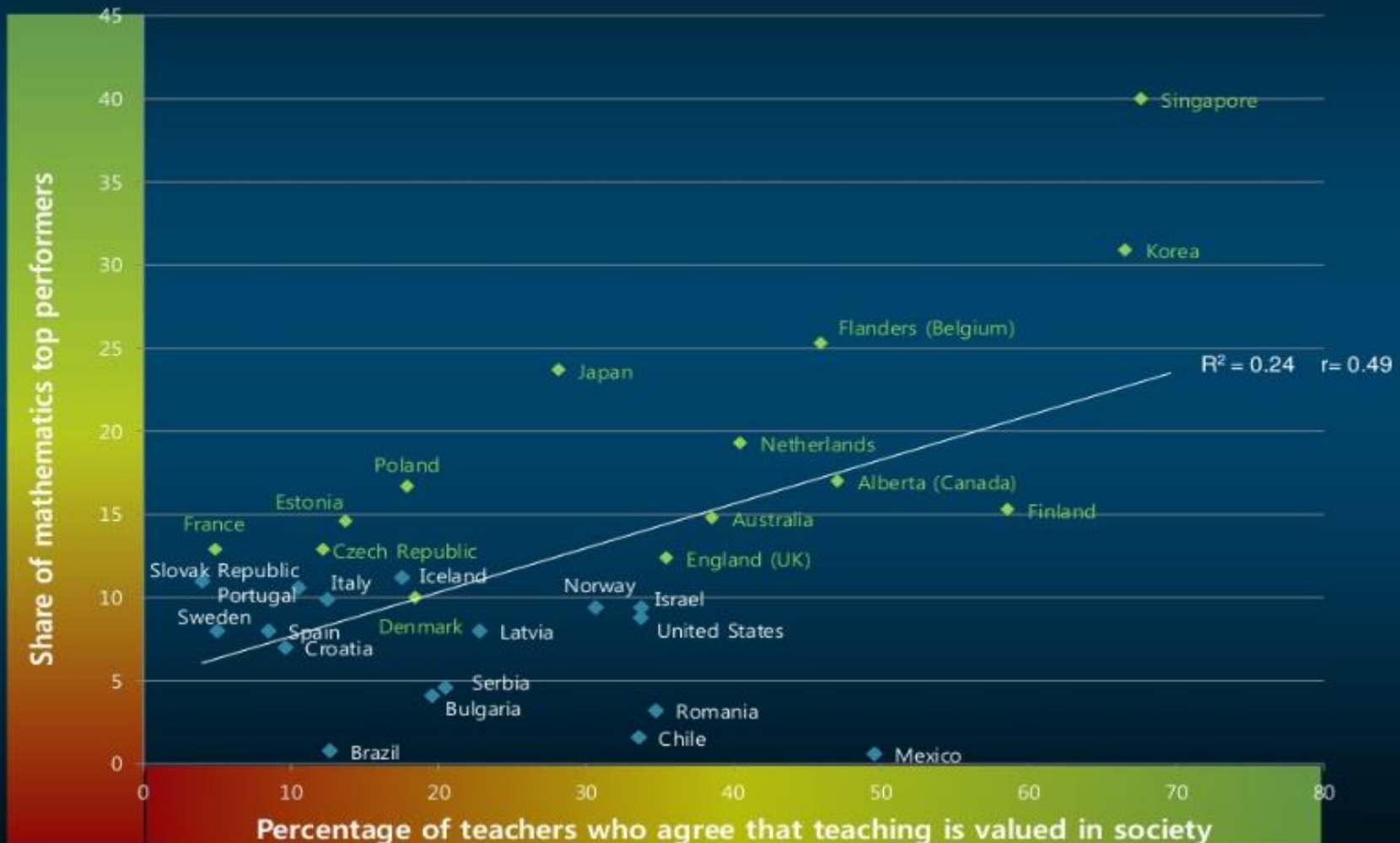


Discuss what methodological problems this kind of governance involves

5

Countries where teachers believe their profession is valued show higher levels of student achievement

Relationship between lower secondary teachers' views on the value of their profession in society and the country's share of top mathematics performers in PISA 2012



2. Comparing to improve practice in education

- Seeking *best practice* by comparing practices in different countries
- Looking for *evidence based practice* – across political and cultural boundaries.
- What problems do you see in identifying '*best practices*' and giving recommendations for '*evidence based practice*' ?

Transfer or learning of policies and practices?

- *Transfer* : direct implementation – e.g. EQF
- *Translation*: adjustment to national/local context e.g. APEL
- *Transformation*: of policies and institutions e.g. the introduction of apprenticeship in Sweden 2011 – Gy11.
- *Learning*: using inspiration from outside to innovate own practices

3. Comparing to improve our understanding of the educational system

Promoting curiosity by discovering differences in education

- Developing concepts and theories of education by exploring common patterns across national borders.
- E.g. develop concepts of models or regimes by comparisons to explain the different dynamics of different VET-systems

4. Compare to explore alternative solutions to common problems

- Looking for ‘natural experiments’: examining different ways of managing similar challenges in different VET-systems.

e.g. introducing an apprenticeship system in another Nordic country

What are we comparing?

Comparing isolated performance indicators or
comparing VET-systems?

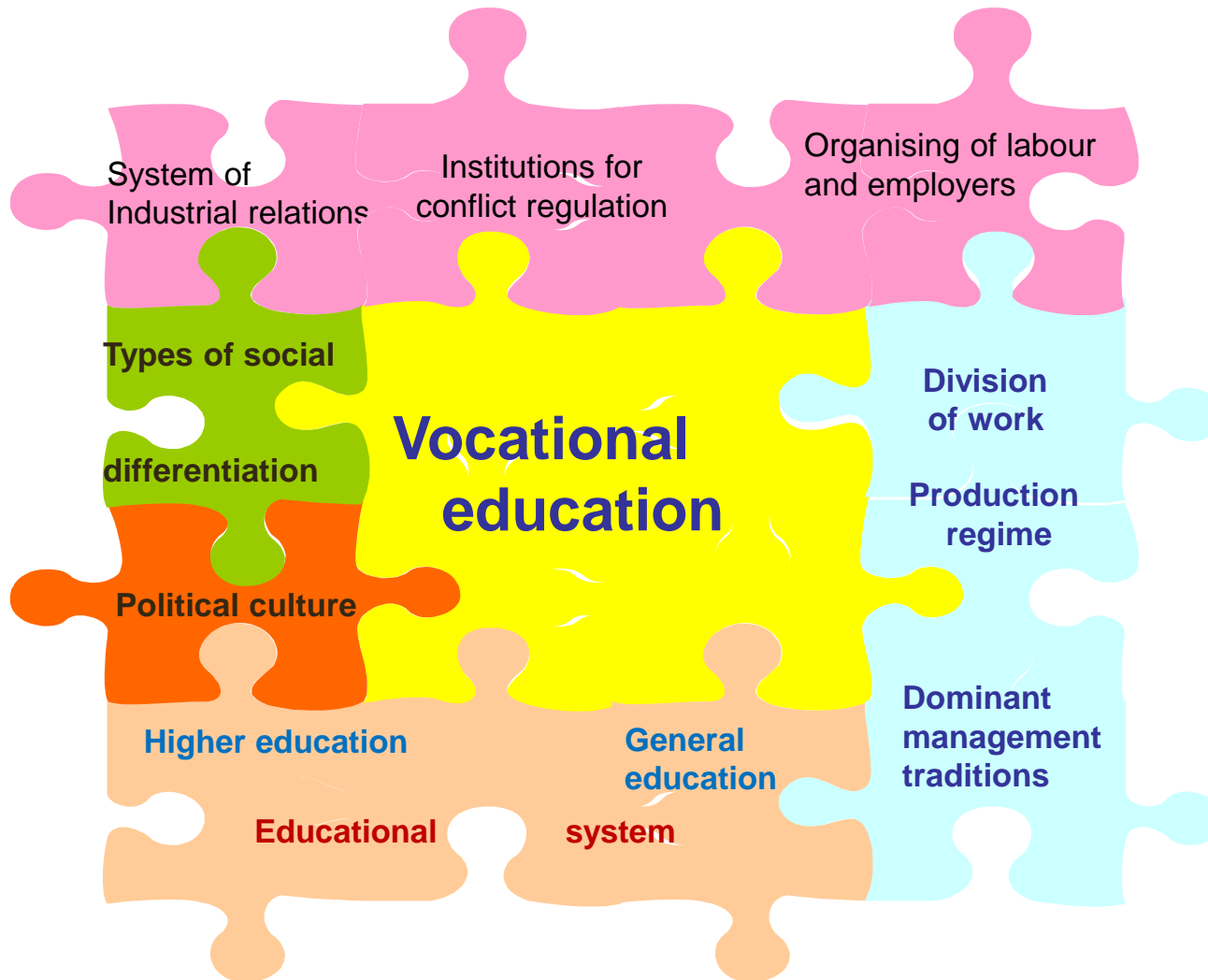
Specific features of a VET-system should be analysed in relation to
the whole VET-system – and the societal context

- concepts of VET-systems



The concept of a model of VET or a VET regime

- embeddedness and institutional complementarity



Form of regulation	1. Market	2. State	3. Corporatist
Rationale	Logic of production	Logic of School learning	Occupational logic ('Beruf')
Political culture	Liberalist	Centralist conservative (étatisme)	Corporative consensus
Institutional framework for VET	The business'	The school system	The trade/vocation
Dominant criteria of valid knowledge	Is it useful? employability	Is it correct according to theory?	Is it socially acceptable and relevant?
Labour market type	Internal labour market / secondary LM	Professional and internal LM	Vocational labour markets
Social differentiation	Insiders – outsiders on the market	Higher – lower rank in education hierarchy	Skilled – Unskilled worker - Academics
Identity	Organizational identity	Citizen Educational title	Vocational identity

From Jørgensen, C. H. (2009). Fag mellem arbejde, organisation og uddannelse: har fagene fremtiden bag sig?. *Tidsskrift for Arbejdsliv*, 11(3), 13-31.



Methodological approach of Nord-VET

Comparative research in four Nordic Countries

Nordforsk research project (2013-16) on transitions from VET to the labour market and Higher Education in the Nordic countries:

Finland: Jyväskylä University

Norway: Bergen University, NIFU, FAFO

Sweden: Linköping University

Denmark: Roskilde University

Main question:

How do the Nordic VET-systems handle the double challenge of qualifying for employment and providing access to higher education?



Key concepts in historical institutionalism

(Kathlen Thelen 2004: *How institutions evolve*)

- *Path dependency*: Outcomes of earlier struggles shape a developmental trajectory, that determine the scope for policy today.
- *Cross class alliances*: The organisation of VET-systems are shaped by the struggles, compromises and alliances between the state and the organisations of industry/craft and skilled/unskilled labour.
- *Embeddedness*: The system of vocational education is connected the overall educational system, the labour market and industrial relations system, to the political culture and social class structures.
- *Institutional complementarity* “components of a whole mutually compensate for each others deficiencies in constituting a whole”



Diverging models of VET in the Nordic Countries

- *Sweden and Finland:* VET programmes in comprehensive non-selective upper secondary education
 - difficulties retaining non-academic youth in full-time school based education
- *Denmark:* Separate system of apprenticeship
 - smooth transition to employment, but high drop-out rates
- *Norway:* 2 years of school based +2 years of work based learning
 - postpones the specific choice of occupation,
 - opportunity for horizontal transfer to general programmes: a ‘leak’?



Key challenges for vocational education in the Nordic Countries

Comparison: How do the VET-systems handle the double challenge of

1. qualifying for skilled employment in an occupation and
2. providing access to higher education?

Dilemma for VET at the same time to:

- Be inclusive for non-academic youth and weak learners and
- Maintain high esteem among young people



Full time school based systems (SE, FI)

Advantages

- Postpones division in tracks and streams
- Provides equal access – independent of training places
- Promotes education for citizenship
- Provides general access to higher education

Weaknesses

- Have weak links to the labour market
- - and difficult transitions to employment
- Few opportunities for non-academic youth
- High youth unemployment



Models based on apprenticeship (DK, NO)

Advantages

- Provides an alternative pathway for non-academic youth
- Have strong links with the labour market
- High employment rates - low youth unemployment

Weaknesses

- Early division in tracks reinforce social and gender segregation
- Capacity depends on available training places
- Does not give general access to higher education
- Decreasing esteem – appear as ‘dead end’.

All models involve trade-offs and policy dilemmas

Research questions:

1. How did these dilemmas emerge *historically*?
 - the development of the institutional architectures and policy coalitions.
2. What are the *current state* of the dilemmas in each VET-system?
3. What are the results of recent *reforms* and what *innovations* are introduced to cope with these dilemmas?
4. What strengths and weaknesses of the systems can be found through *case studies* in selected occupations?
5. What can be *learned* from the Nordic countries to develop vocational education for tomorrow?

How to make these Nordic comparisons?

Holistic approach to understand the complex working of the systems

Comparative methodology:

1. Identify four common research questions for the country studies
2. Study key challenges for VET in historical context and currently
3. Identify common, current challenges for VET in the Nordic Countries
4. Study the responses and solutions to these challenges
5. Explore the scope for policy and the potential for policy learning

... to give an example of work in progress

Common patterns in the period 1960s – 1990s	Common challenges	Common reforms and responses
	<ul style="list-style-type: none"> • Crisis for traditional apprenticeship and for locally embedded school based VET-programmes 	<ul style="list-style-type: none"> • 1960-70s: Shift to holistic and long term central state planning of educational (including VET) to standardise, rationalise and to control budgets.
	<ul style="list-style-type: none"> • Rising social demand for equality in access to all levels of education and against separation of general and vocational education. 	<ul style="list-style-type: none"> • Initiatives to integrate vocational and general upper secondary education.
	<ul style="list-style-type: none"> • Emerging new challenge for VET of providing double access: access to higher education in addition to access to the skilled labour market 	<ul style="list-style-type: none"> • Reforms to increase permeability from upper secondary VET to higher education to promote equal opportunities, social mobility



Stages in the project:

1. Historical emergence of the institutional architectures of VET-systems

Country reports published June 2014

2. Transition patterns from VET to HE and to the labour

Country reports ready for seminar in Sept. 2014

3. Policies to improve transitions – *reforms and innovations*

Country reports for seminar in February 2015

4. Contextualised case studies in two occupations

Country reports for seminar in September 2015

5. Comparison of the four VET systems and policies

Book medio 2016: opportunities for policy learning

First stage: historical emergence of the national VET systems

Draft first reports 1A presented in Oct. 2013

- Trajectories, path dependencies
- Drivers, stakeholders and the coalitions, critical junctures
- Development of the institutional architecture



Second stage: identification of main challenges for VET in four periods

First comparative analyses presented in Febr. 2014

- The key challenges for VET for each period and
- the responses given to these challenges

Finland	Sweden	Denmark	Norway	Initial comparative analyses
1.Period 1850-1945	1.Period 1850-1945	1.Period 1850-1945	1.Period 1850-1945	Challenges and responses
2.Period 1945-1970	2.Period 1945-1970	2.Period 1945-1970	2.Period 1945-1970	Challenges and responses
3.Period 1970-1990	3.Period 1970-1990	3.Period 1970-1990	3.Period 1970-1990	Challenges and responses
4.Period 1990-present	4.Period 1990-present	4.Period 1990-present	4.Period 1990-present	Challenges and responses



Third stage: Current challenges for the four national VET systems

Draft reports presented in Sept. 2014 in Helsinki

- access to the labour market and employment
- giving access to higher education
- esteem of VET
- inclusion and high completion rates

Initial comparative analyses

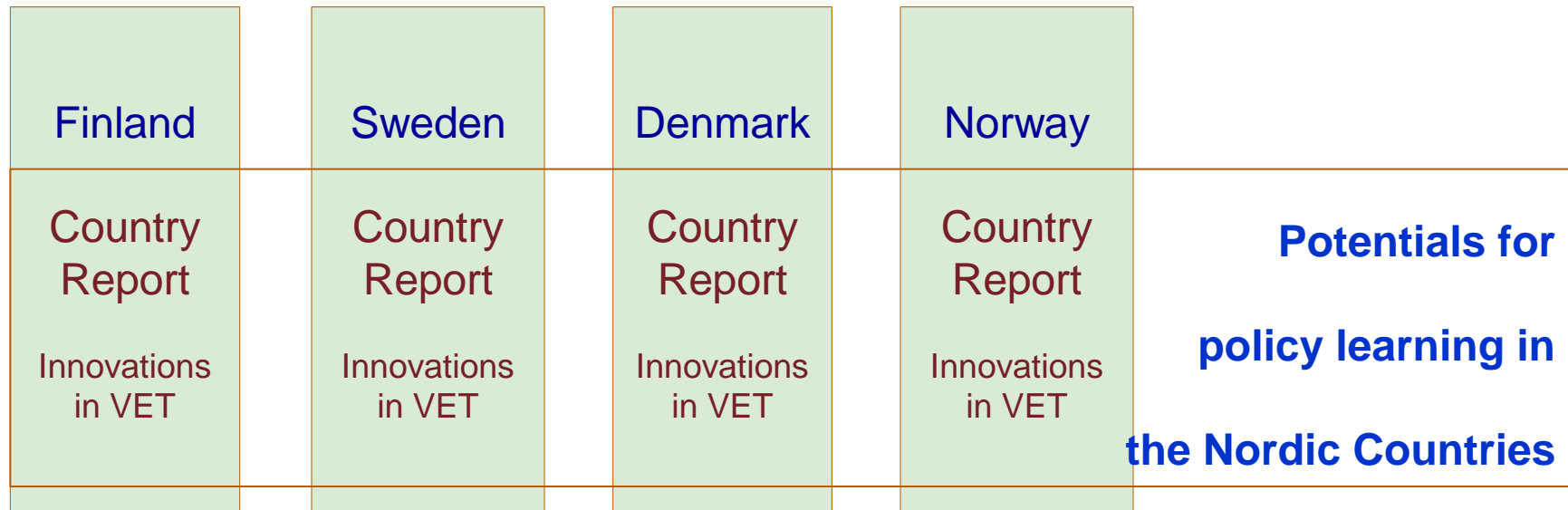
Finland	Sweden	Denmark	Norway	
				Access to employment
Country Report	Country Report	Country Report	Country Report	Access to Higher education
Current Challenges for VET	Current Challenges for VET	Current Challenges for VET	Current Challenges for VET	Esteem of VET
				Inclusion and completion



Fourth stage: Innovations in the four national VET systems

Draft reports presented in Jan. 2015 in Oslo

- Recent reforms - Hybrid programmes?
- New solutions to well known dilemmas
- Potentials for policy and pedagogical learning



Fifth stage: studies of three occupations

Draft reports presented in Dec. 2015 in Copenhagen

- Workbased – school based learning
- Involvement of labour market partners
- Social and gender segregation

Finland	Sweden	Denmark	Norway	
Country	Country	Country	Country	Construction
Report	Report	Report	Report	Health care
Three	Three	Three	Three	
Occupations	Occupations	Occupations	Occupations	Retail

Fifth stage: studies of three occupations

Draft reports presented in Dec. 2015 in Copenhagen

- Workbased – school based learning
- Involvement of labour market partners
- Social and gender segregation

Finland	Sweden	Denmark	Norway	
Country	Country	Country	Country	Construction
Report	Report	Report	Report	Health care
Three	Three	Three	Three	
Occupations	Occupations	Occupations	Occupations	Retail

First findings from historical comparisons

The transition to industrial society was a decisive period for VET:

What new forms of regulation took over from the guild system?

Collective skill formation in VET depends on strong regulation:

- To safeguard employers and employees *investment* in training,
- High *involvement* of labour market partners,
- General *certification* of work based training,
- Quality control to ensure broad *occupational* skills,
- *Redistribution* or sharing the costs of training,
- Opportunities for progression to higher education from VET.

First findings from the historical comparisons

The current policy options depend on the historical trajectories:

- Path dependencies – though not deterministic
- Self-reinforcing dynamics in the evolution of VET
- Divergent trajectories for institutionalisation of work-based training
- Various degrees of involvement of labour market partners in VET
- Different forms of governance of VET:
- Various combinations of *state*, *market* and *corporatist* regulation