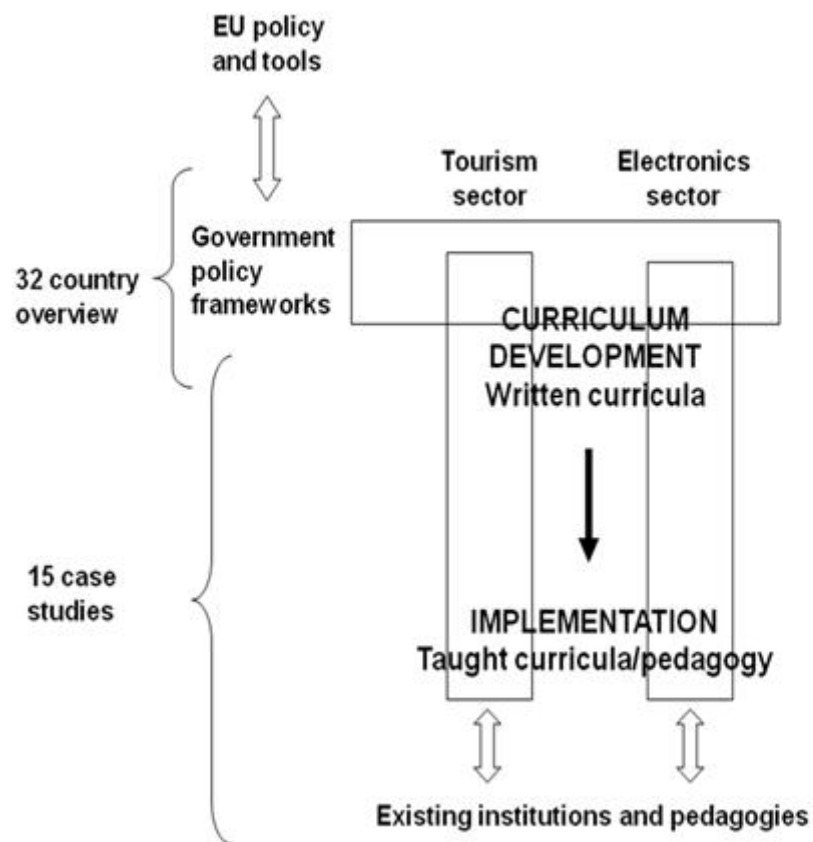


# **European developments in designing and delivering outcome-oriented curricula in VET: trends and challenges**

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Thessaloniki, April 26 2012

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## RESEARCH OUTLINE



## Research Foci

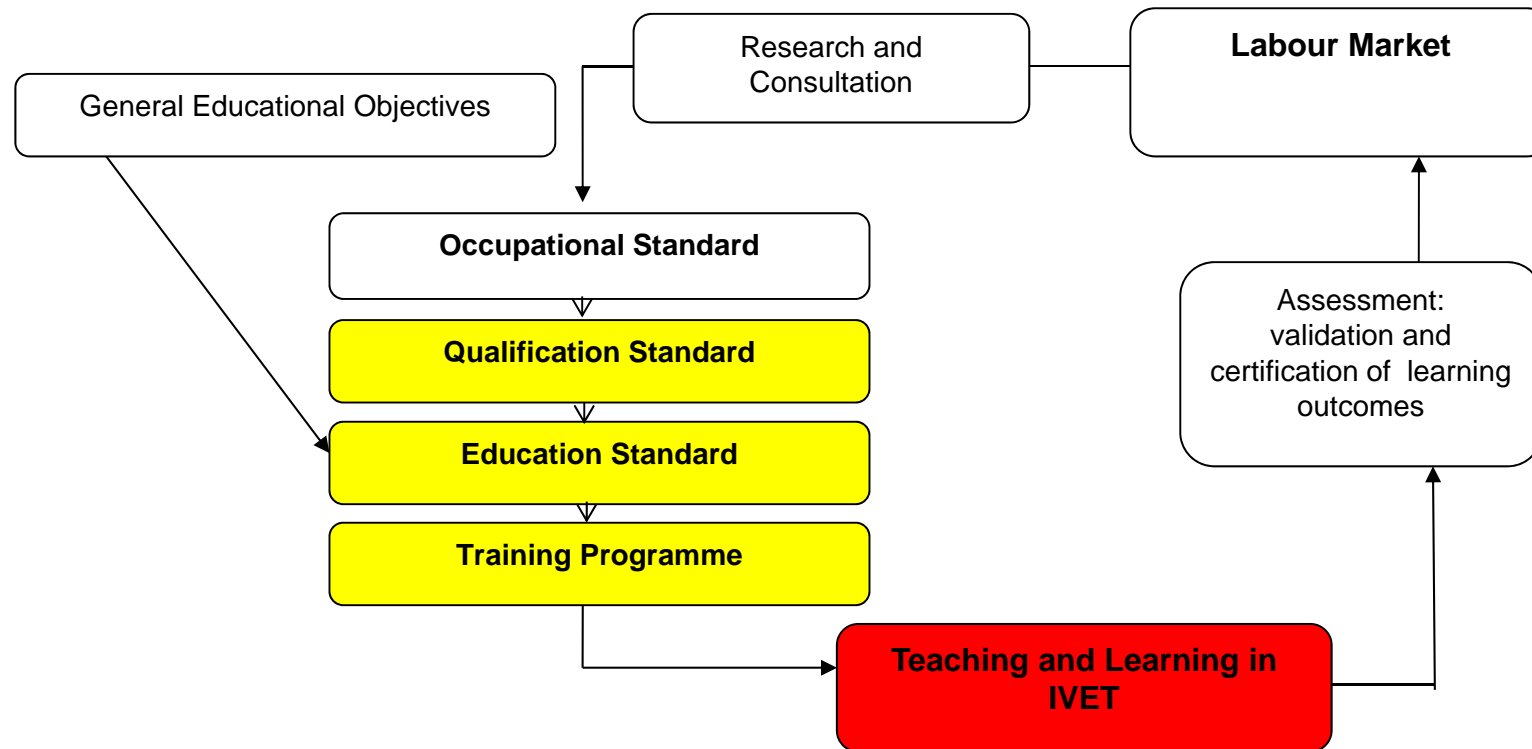
- Policy in relation to outcomes-orientated curricula: rationale, progress
- Design process and stakeholder contribution
- Formulation of knowledge, skills and competences in written curricula – other components of written curricula
- Taught curricula – teaching and learning styles, environments, good practice

# Evidence Base

Research conducted: January 2011 – May 2012

- 32 country reviews
  - 82 interviews
- 15 case studies
  - interviews
    - 28 curriculum experts
    - 25 employers or representatives
    - 72 teachers (25 schools and centres)
    - 112 students

# Theoretical model of the outcomes-orientated approach: articulating labour market and IVET



Documents (‘Standards’)	Occupational standard	WRITTEN CURRICULUM		
		Qualification Standard	Education Standard	Training or Learning Standard (learning programme)
<b>Processes</b>	Work activities are classified, described and levelled.	Descriptions of work activities are translated into statements of what learners should acquire from education/training. These statements are grouped into units (for the purposes of assessment). Also describes what evidence should be available to warrant judgments about learning outcomes.	Learning outcomes are situated in educational context, for example, related to: subject knowledge, content, assessment processes and events, institutional responsibilities, duration (hours, terms and years).	A plan for the teaching, learning and assessment activities that specifies in detail how learning outcomes will be achieved. The character of teachers, resources, materials, tools etc. are detailed. This document may be produced at school level or it may be shared.
<b>Elements</b>	<b>Competences</b>	<b>Learning Outcomes</b> in Units: knowledge, skills and ‘competences’ Also assessment criteria.	<b>Learning outcomes</b> in Modules or Options	<b>Learning Outcomes</b> in Modules (modules may be set in real time, classes, teachers and rooms may be allocated)

# Progress of outcomes-orientated approaches

## **“Early developers”**

UK, Sweden, Norway, Finland,  
Belgium-Flanders, Netherlands,  
Lithuania, Poland, Hungary, Slovenia

## **“Recent developers”**

Belgium-Wallonia, Bulgaria, Croatia,  
Cyprus, Czech Republic, Estonia,  
Greece, Iceland, Latvia, Lithuania,  
Malta, Slovakia

## **“Competence-conceptualisers”**

Austria, Germany, Denmark,  
Portugal, Spain

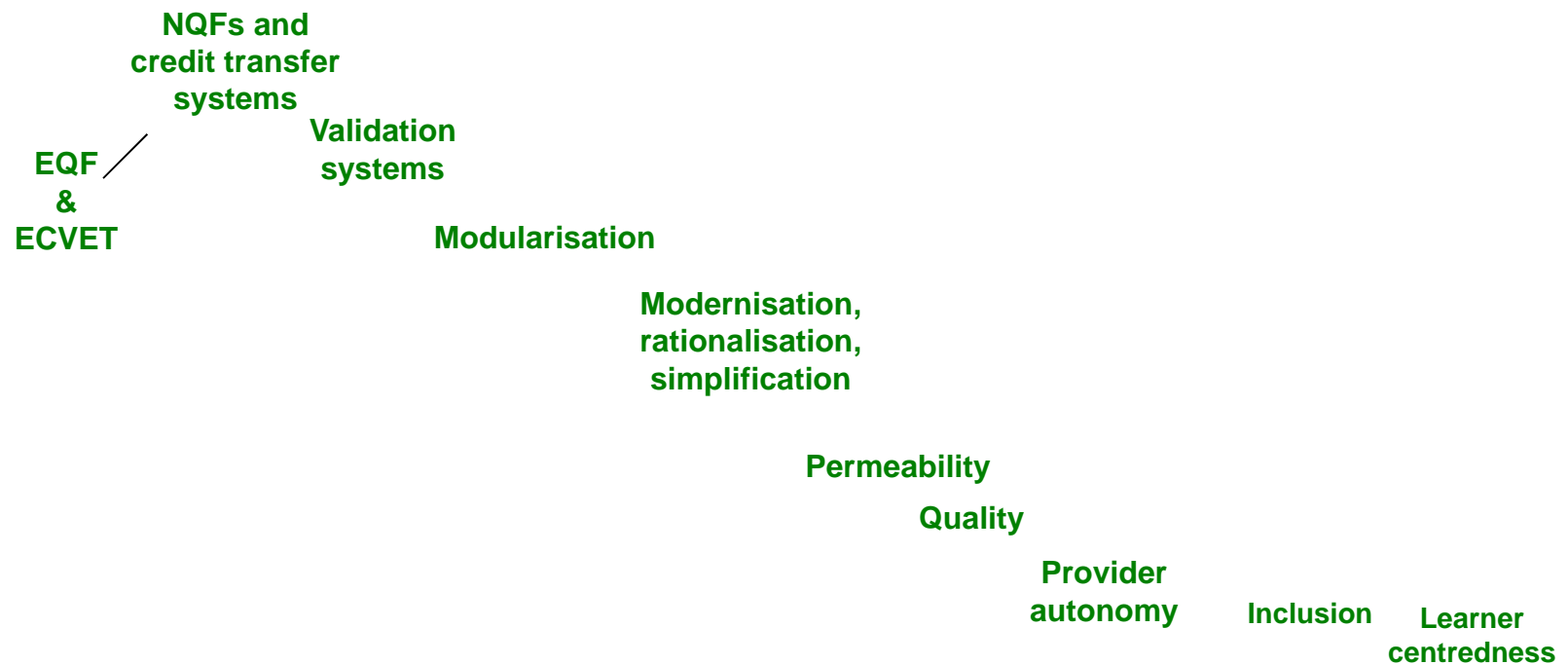
# Outcomes-orientated curricula at policy level: rationales

Overarching  
Goals

Economic & Social



Operational  
Objectives





# Design Process

- Start with ‘occupational competences’ and translate them iteratively into ‘learning outcomes’ that make sense for the purposes of teaching, assessing and recognising learning
- Incorporate other learning outcomes, e.g. drawn from subjects, statements of generic skills and other educational goals
- Engage various stakeholders and structure and co-ordinate their engagement in the design process

**Stages in the development of *Baccalauréat Professionnel Systèmes électroniques et numériques* curriculum in France in comparison to model (in grey)**

Model Documents	Occupational standard	Qualification Standard	Education Standard	Training Standard
Model elements	Competences	Learning Outcomes grouped into units with assessment criteria	Learning outcomes linked to content, guidance and references to the rest of the curriculum	Learning Outcomes in teaching or training modules
France: documents	<i>Référentiel d'activités professionnelles</i>	<i>Référentiel de Certification</i> – consisting of several sections:		
France: elements	<i>Fonctions &amp; activités</i>	<i>Compétences</i> and sub-competences	<i>Savoir-associés</i>	Content, guidance for teachers, inspectors etc.
				Programmes in different tracks: school, enterprise, apprenticeship tracks

**Ireland: Stages of curriculum development for Traineeship in Professional Cooking in comparison to model (in grey)**

Ideal Type	Occupational Standard	Qualification Standard	Education Standard	Training Standard
Ireland: documents	Awards – Composed of ‘modules’ which are composed of ‘units’			Programme profile
Ireland: elements	Learning Outcomes organized into units			Modules & learning outcomes and mark allocations

Differentiated	France (Bac Pro), Slovenia (Gastronomy and Tourism), Romania (Technician in Tourism), Luxembourg (Mechatronics)
Medium differentiated	Hungary (Tourism advisor)
Undifferentiated	Ireland (Traineeship in Professional Cooking), England (Travel Services), Finland (tourism sales), Spain (Higher Technical Tourist Guide)

# Representation in the design process

- working groups – specialised, general, permanent
- consultation – procedures, how extensive?
- governance – government, sector, shared (e.g. tripartite)
- value-added by representation
- responsiveness of outcomes-orientated curricula
- role of experts - fluency in 'learning outcomes' (talking and drafting)
- Issues: employer engagement, cost, time, sustainability, conflicts of interest

# Form and function

- Curriculum intended to be norm that shapes learning and ensures that it is relevant for learners and stakeholders
- Learning outcomes provide a thread through the different stages of the written curriculum – which ensures validity - but the learning outcomes have to be adapted and organised to ensure that they are coherent and deliverable
- The formulation of learning outcomes is likely to shape the way that they are likely to be taught and assessed, e.g. the separation of theory and practice and of vocational and generic skills, degree of granularity
- The grouping of learning outcomes (into units and then modules) affects teaching and assessment.

## Controlling prescription

- the number and specificity of learning outcomes and/or assessment criteria (granularity)
- detailed requirements in terms of knowledge (e.g. France, Croatia) or key competences (e.g. the Netherlands)
- location of decision making on prescription and manner in which prescription is governed
  - national, regional, local

# Measuring granularity

Granularity	Hours per learning outcome	Examples
High	Less than 10	Luxemburg (mechatronics), Slovakia (engineering), Spain (tourism), Sweden, Netherlands (electronics), England
Medium	More than 10; Less than 20	Slovenia (Gastronomy and Tourism, Ireland (Professional Cookery)
Low	More than 20	Norway (electronics), Finland (tourism) France (Bac Pro SEN)

## Key competences – generic skills

- Separate in curriculum and separately taught and assessed through ‘subjects’, e.g. Sweden, Czech Republic
- Separate in curriculum but can be jointly taught and assessed, e.g. Finland,
- Combined with vocational outcomes within units or in particular learning outcomes in curriculum, e.g. Germany/The Netherlands
- Mixed approach to key competences in one curriculum, e.g. France



# Rich Curricula

- Content, e.g. disciplinary knowledge
  - continues to be important as guide to assessment and teaching
- Assessment criteria
  - particularly where there is continuous or extended assessment
- Pedagogical guidance
  - possible to classify curricula into regulative or didactic
  - *but* teachers get guidance from other standards and other sources.

# Learning programmes

- Shared between schools, e.g. National Traineeship Ireland, Mechatronics Poland
  - engagement of teachers, employers and experts
  - burden can be shared
  - additional resourcing
- School-based, e.g. Engineering Slovakia
  - engagement with local employers
  - teacher and student engagement
  - burden? potential?

# The taught curriculum

- Impact of the written outcomes-orientated curriculum
  - lack of policy focus on pedagogy (or lagged)
  - teachers have to interpret curricula
    - may welcome or be concerned by new discretion
    - interpret in the light of existing practice, e.g. local curricula sometimes planned in terms of traditional content
  - assessment methods influence pedagogy

## **Taught curriculum: Learner- centred approaches**

- Project-based learning, group learning, open learning, authentic learning, work simulation, work-based learning, experiential learning are favoured by many teachers and learners
- Supported by:
  - pedagogical guidance
  - appropriate assessment methods, e.g. demonstrations
  - new teaching and learning resources
  - professional development for teachers
  - collaboration with employers
  - use of IT
- Constrained by: time, equipment, rooms, lack of work placements, old textbooks



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# Concluding issues...

- Development of innovative pedagogies
  - diverse approaches
  - changing teacher practices – networks...
  - formative assessment – learner perception of outcomes?
  - work-based and collaboration with employers
- Curricula and the autonomy of teachers and schools
  - How does this autonomy work best?
  - How are quality and validity assured?
- Inclusivity
  - EU inclusion goals
  - Pedagogy, careers, recruitment and learning support