

The conceptual shaping of learning outcomes: Insights from the Future of VET study

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3s

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Research & Consulting
for Lifelong Learning

Objectives of today's input

- __ Brief introduction of the Future of VET study
- __ Findings on the distinction between knowledge, skills and competence in curricula, and on the organisation of learning across different learning sites
- __ Observations on the alignment between intended learning outcomes, the learning process and assessment criteria
- __ A basis for fruitful discussions

Old and New Challenges for Vocational Education and Training



Digitalisation, industry 4.0,
AI, deep learning.



Knowledge-economy,
academisation, bullshit jobs?



Platform economy, microwork,
task markets, Neo-Fordism.

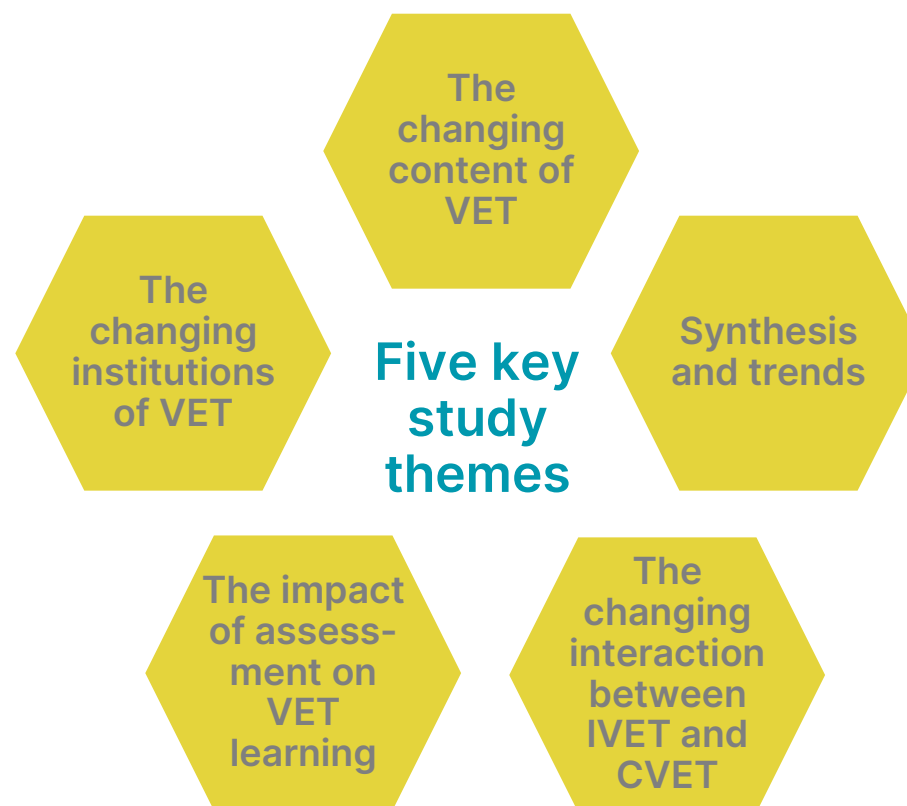
The 'Bigger Picture': Cedefop study on the Future of VET in Europe (2020 – 2022)

Improving our overall understanding of the challenges and opportunities facing European VET in the years to come

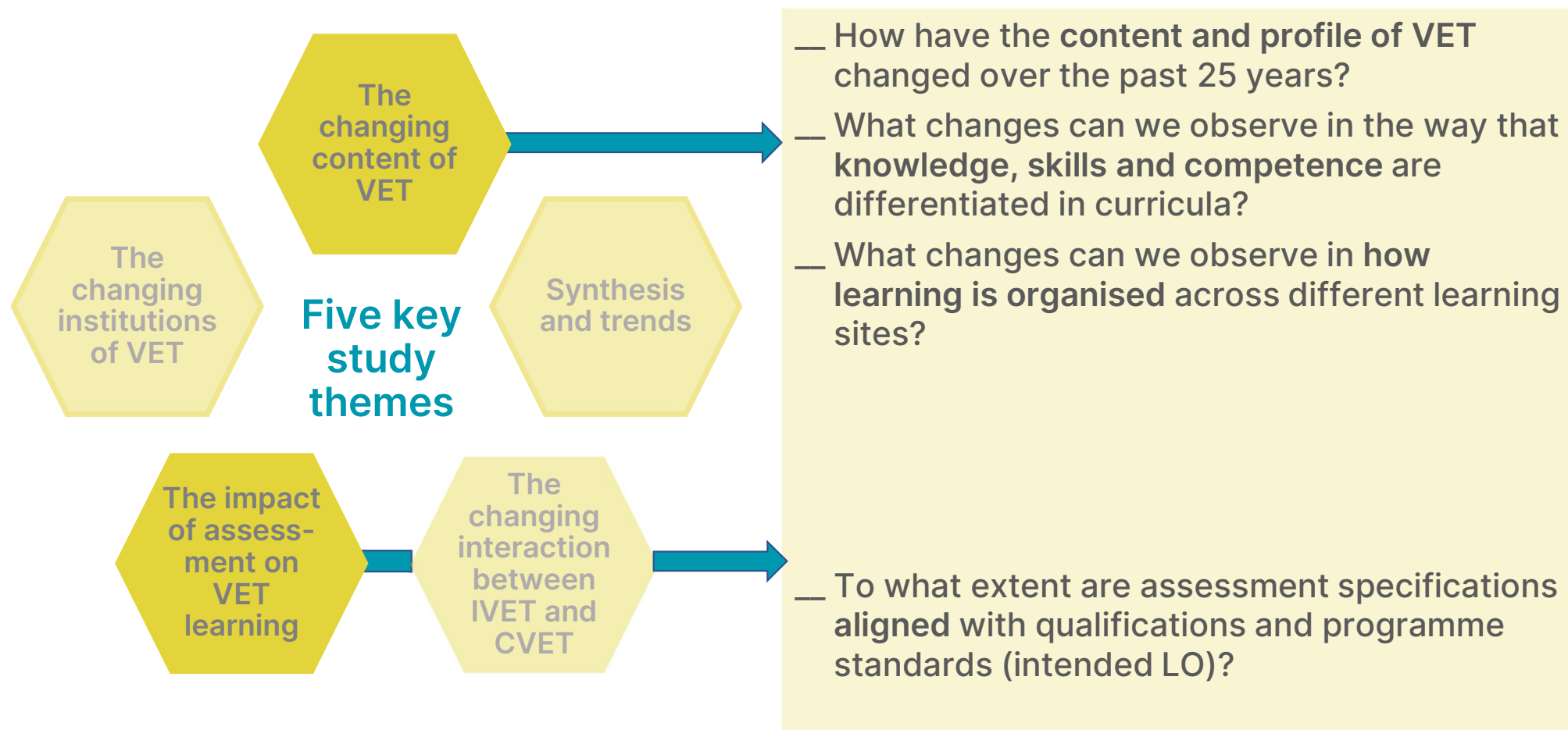


The 'Bigger Picture': Cedefop study on the Future of VET in Europe (2020 – 2022)

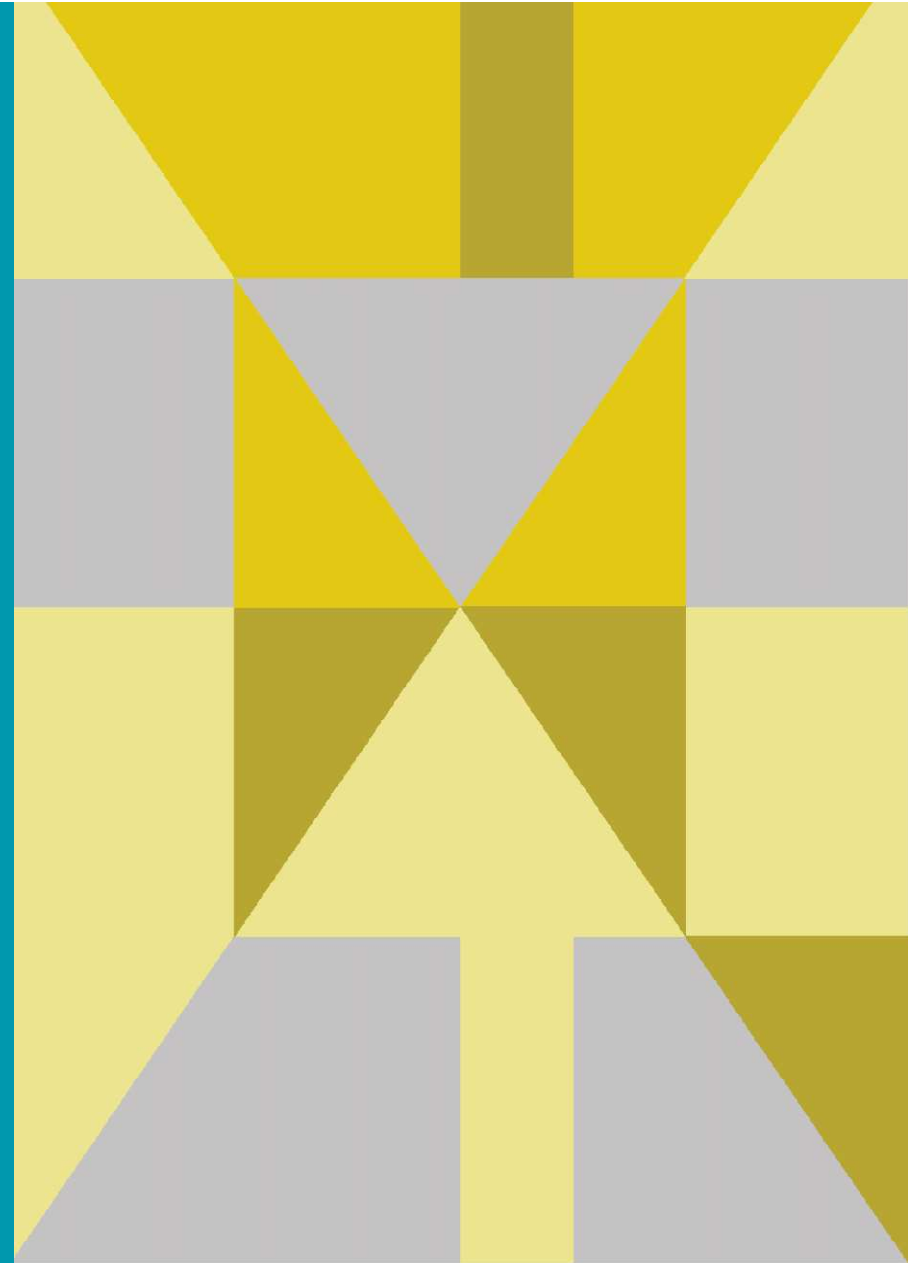
We know surprisingly little about how the structure and content of VET curricula and programmes actually interact with changes in the wider economy and society, especially in the long term.



The 'Bigger Picture': Cedefop study on the Future of VET in Europe (2020 – 2022)



**The conceptual shaping of
learning outcomes in
European IVET:
Insights from the Future of
VET study**



A (over?)simplified categorisation of knowledge and skills in IVET curricula for our study

		In school		Outside school
		Classroom / Homework	Workshops / Laboratories	Workplaces / Companies
general vocational	general	(a) general/academic knowledge (e.g. maths, chemistry, foreign language general)	(e.g. skills learned in language labs or chemistry labs)	(e.g. improving communication or team skills)
	vocational	(b) theoretical VET knowledge (e.g. marketing, engineering, domain specific foreign language)	(c) practical vocational skills (e.g. freehand drawing, programming)	(d) job-specific skills (company-specific, local knowledge)
		theoretical	practical	



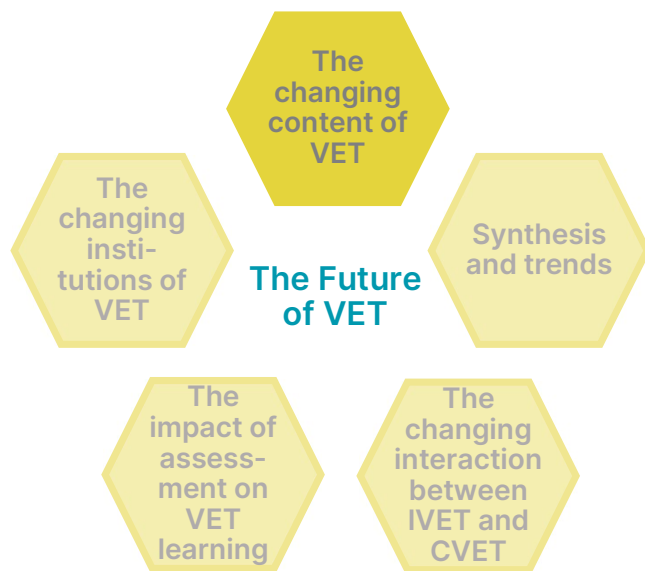
Additional complexity through transversal skills and competences: lack of terminological and conceptual clarity

The changing content and profile of VET 1995 - 2020: general observations from the Future of VET study

- Increased level of authority and autonomy to regional and local levels
- Incremental changes to VET curricula
- Shift to learning-outcomes-based approaches firmly anchored as an important principle of curriculum design (partly alongside competence-based approaches)
- Considerable variations in approaches to integrate vocational and general education content
- Individualisation and modularisation add complexity to the research task
- Vocational curriculum on paper (explicit or written curriculum) as focal point

How has the balance between occupation-specific skills, general subjects, and transversal skills in IVET evolved over time?

Part I



- Distinction between general and vocational subjects or skills common across IVET curricula
- Strengthened general education component of VET programmes (through increased teaching in general subjects or better integration into vocational curriculum)
- Increase in workplace learning in IVET curricula is ubiquitous (alongside greater emphasis on GE skills)
- Only few examples of increase in the vocational skills component
- Workplace learning more integrated into the learning process

Example: changing balance between general and vocational components in Czech VET

Form of study	Period	Length of study	General component		Vocational component		TOTAL	
			Length per week	%	Hours per week	%	Hours per week	Ratio (weekly hours per year)
ISCED 3C (353)	Before 1989	3	38	37%	66	63%	103	35
	1990-97	3	28	28%	72	72%	100	33
	1998-2004	3	29	29%	70	71%	98	33
	After 2004	3	28	30%	71	72%	99	33
ISCED 3A (354)	Before 1989	4	51	39%	80	61%	131	33
	1990-97	4	54	41%	78	59%	132	33
	1998-2004	4	53	39%	82	61%	134	34
	After 2004	4	69	52%	64	48%	132	33

Note: Some subjects (ICT and economics) were moved from the vocational component to the general education component.

Example: minimum level of competences in Finnish VET qualifications – business and administration

Year	Common studies (%)	Vocational studies (%)	Optional studies (%)
1990	38%	55%	7%
1992	44%	48%	8%
2000	17%	67%	16%
2017	19%	62%	19%

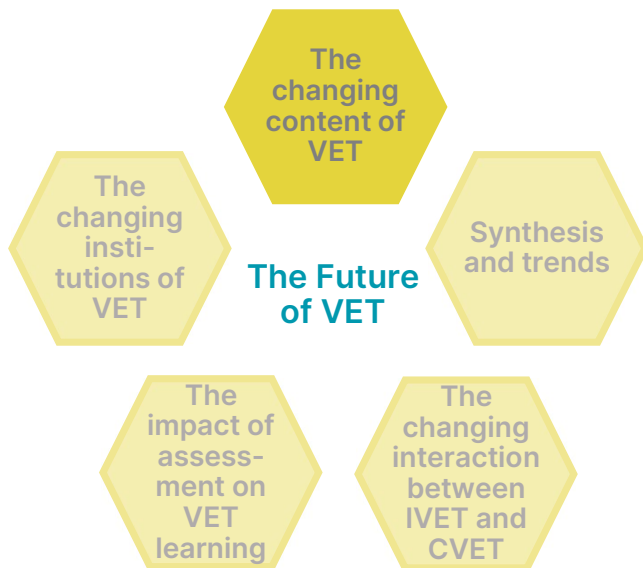
Example: comparison of Austrian VET college curricula

Findings for school-based VET in Austria suggest both an increase in workplace learning and in practical learning in workshops over time. When analysing individual qualifications, the picture becomes more differentiated.

Curricular categories	Higher VET college for mechanical engineering (EQF 5)		Higher VET college for business administration (EQF 5)	
	1993	2015	1994	2014
Year of curriculum	1993	2015	1994	2014
General education subjects	37%	41%	53%	50%
Occupation-specific theory	40%	36%	36%	33%
Occupation-specific practical learning	19%	18%	11%	11%
Work placement	4%	4%	0%	5%
	100%	100%	100%	100%
Total number of hours of education and training	7,441	6,931	6,014	5,956
Programme duration in years	5	5	5	5
Number of hours of education and training per year	1488	1386	1203	1191

How has the balance between occupation-specific skills, general subjects, and transversal skills in IVET evolved over time?

Part II



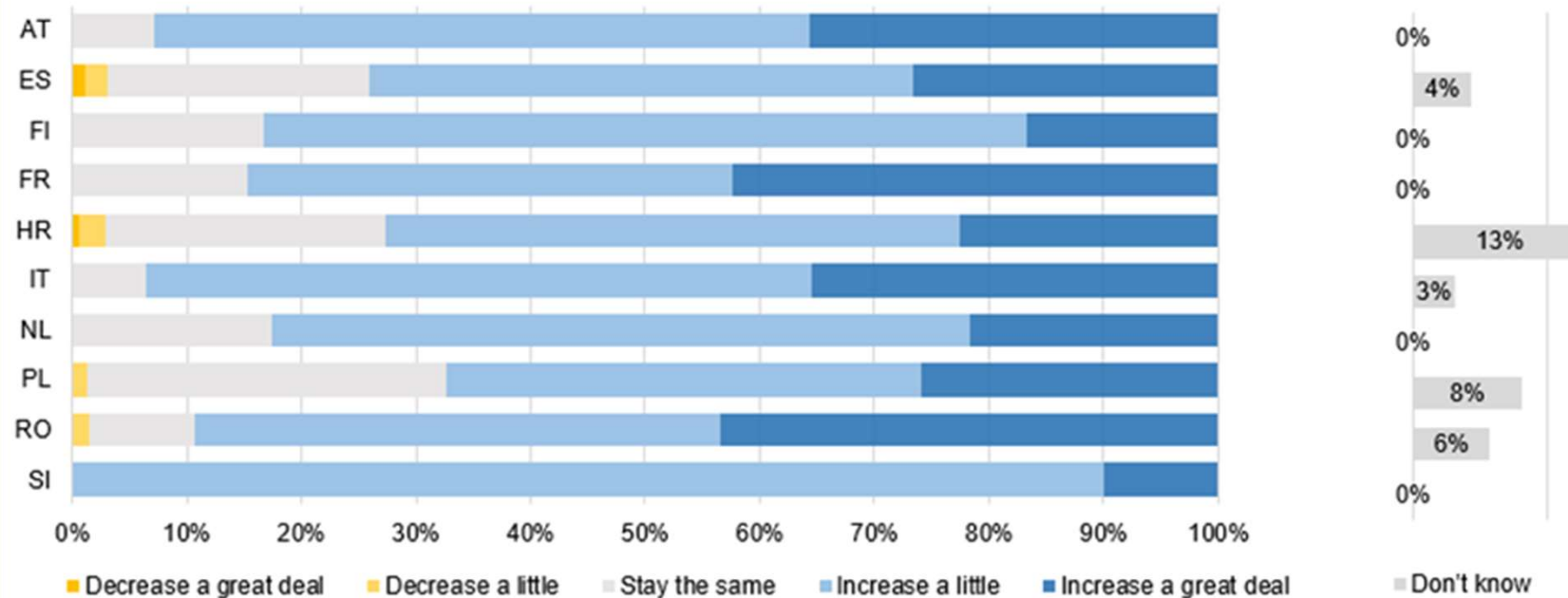
— Key trend: transversal skills increasingly visible in reference documents (e.g. curricula)

— BUT: expressed in a variety of different forms and may be included both in general education and vocational content, or indirectly covered via teaching approaches/methodes

→ Increased emphasis on transversal LO may be both a sign of either vocational or academic drift

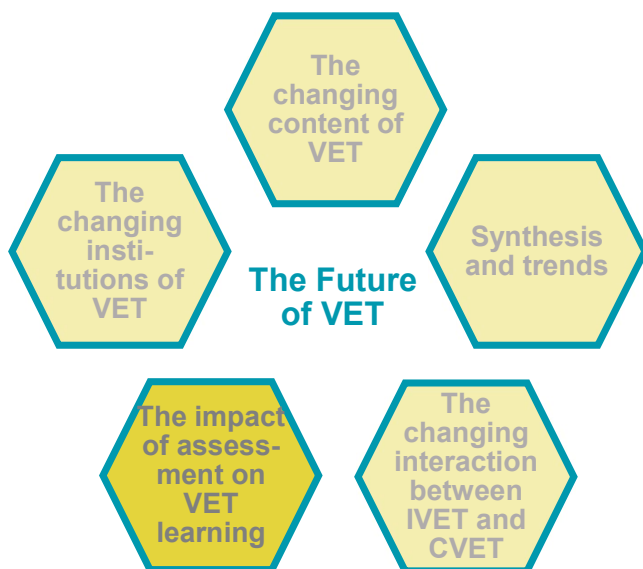
Insights from the VET provider survey: expected future emphasis on transversal/soft skills

Thinking about the next ten years, the emphasis we put on transversal/soft skills will....



Zooming in on assessment: selected key findings on alignment and assessment of transversal skills

Part II

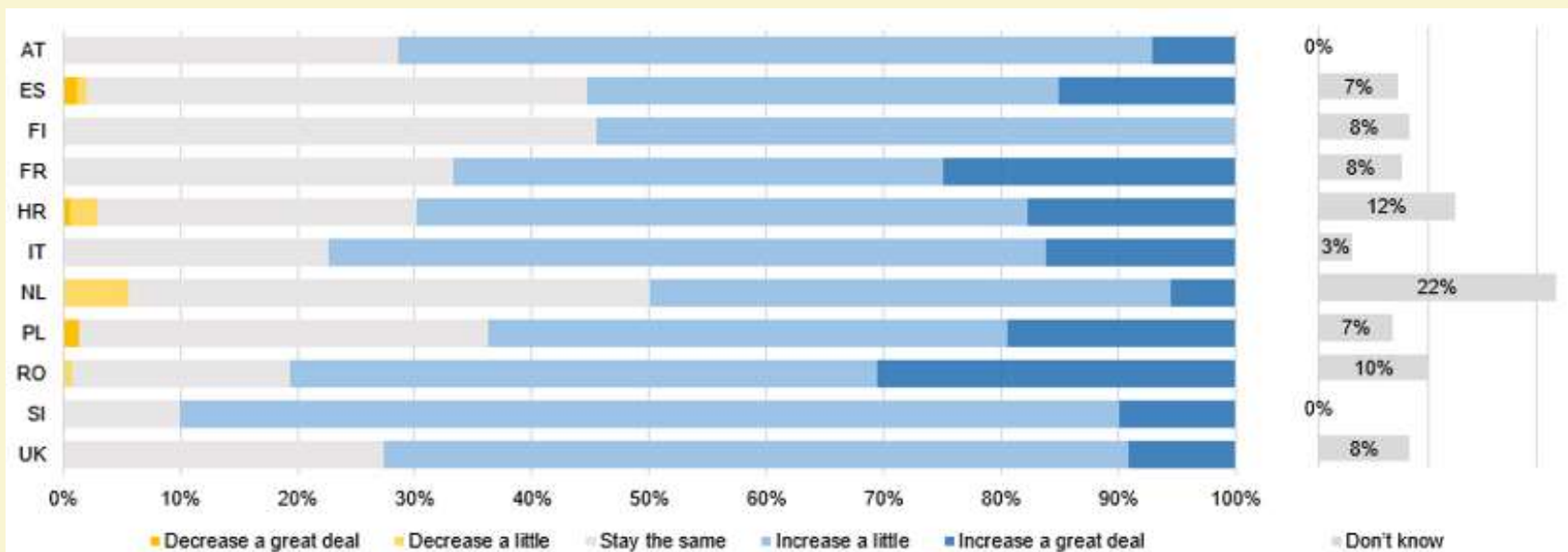


- Alignment: evidence of increased use of assessment standards - strengthened by the shift to LO
- Observed coherence between intended LO, delivery and assessment
- Key issue: 'getting the balance right'

- Increased emphasis on assessment of learners' transversal skills (though more evident for formative than summative assessment)

Insights from the VET provider survey: expected future change in the use of assessment standards based on learning outcomes

Thinking about the next 10 years, the use of assessment standards based on learning outcomes at our institution will...



Source: VET provider survey. Data from selected countries. n = 893.

Some concluding remarks

- __ Assessing the significance of change comparatively on the basis of reference documents and reports is challenging and not without caveat.
- __ Comparisons of the balance between different types of knowledge and skills were ,easiest' when timetables (comparison based on workload or teaching hours!) were available.
- __ Analysing and comparing VET content becomes more complex with the general transition to learning outcomes based approaches and when optional elements/electives play an important role.
- __ The ambivalent position of transversal LO points to a need for more research both on the written and enacted curriculum.

The Future of VET in Europe: volume 1



Cedefop (2022). The future of vocational education and training in Europe. Volume 1: the changing content and profile of VET: epistemological challenges and opportunities. Luxembourg: Publications Office of the European Union. Cedefop research paper; No 83. <http://data.europa.eu/doi/10.2801/215705>

& more
forthcoming...



Thank you!

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