Key competences in initial vocational education and training

19-20 September 2019 Cedefop Thessaloniki

#KeyCompetences www.cedefop.europa.eu





Presentation of the study results: digital

Mariya Dzhengozova, 3s (Panteia consortium)

Agenda

- 1. Conceptual framework and definitions
- 2. National policies on digital competence
- Inclusion of digital policies in IVET in qualification types referenced to EQF levels 3, 4 and 5
- 4. Digital competence in curricula of individual programmes
- 5. Conclusions

Conceptual overview

Selected key competences: literacy, multilingual, digital competence

National policies promoting key competences

IVET in the countries

Key competences included in the learning outcomes as described in reference documents, such as educational and occupational standards, including learning outcomes and/or educational objectives

Key competences included in programmes leading to qualifications/delivery of IVET

Key competences included in assessment procedures

Key competences included in teacher competences Policies: Determine what are characteristics of national policies promoting key competences in IVET

Key competences in IVET: Determine in which areas of the IVET system key competences can be found included

Determine the kind of relationships there can be between policies and key competences inclusion in IVET

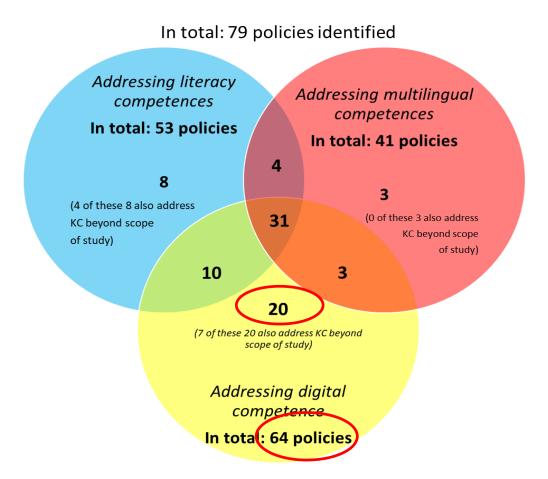
Definitions used in the study

- Promoting key competences: policies that mention and raise awareness about key competences in IVET, but do not include specific actions
- Inclusion of key competences: a static picture of the way that key competences are dealt with in IVET
- Embedding key competences: policies describing specific actions aiming to increase the extent to which key competences are included in IVET
 - these actions may refer to: changes in reference documents; delivery in programmes/curricula; assessment/examination; or teacher and trainer competences.

1. Layer: National policies (2011-2018)

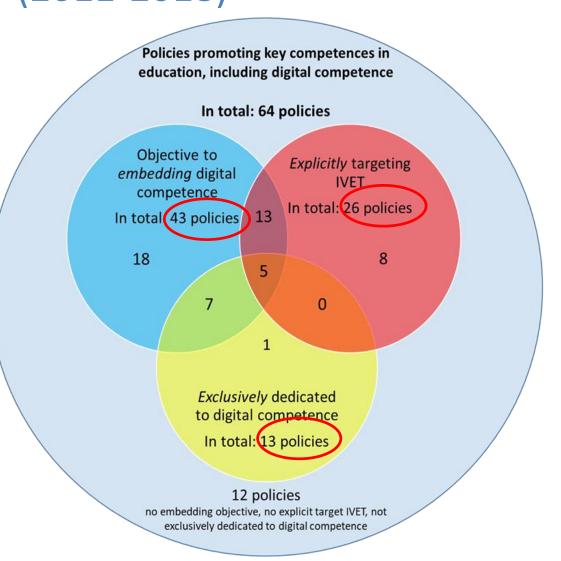
How have policies promoted key competences in initial VET since 2011?

Policies addressing/promoting literacy, multilingual & digital competences



National policies on digital competence to the EU+ countries (2011-2018)

- All but one EU+ countries adopted and started implementing policies promoting digital competence in IVET.
- We found 64 policies that promoted digital competence in IVET;
- Embed vs promote
- Explicit targeting IVET vs broader sectoral focus
- Exclusively dedicated to digital competence vs broader KC focus
- Most policies (39 of 64)
 that promote digital
 competence in IVET are
 strategies.





National policies on digital competence

- Between 2011 and 2018, most policies were adopted in **2014** (16 policies).
- 44% of the 64 policies refer to EU/international initiatives
- Most policies are not explicitly linked to Bruges priorities and Riga conclusions
- 2011-15: two thirds of policies addressing digital competence have (largely) implemented the activities as planned
- 2016-18 policies are more often still in an implementation phase



National policies on digital competence

The 64 policies identified seek to embed digital competence through:

- programme delivery (37),
- reference documents (occupational/educational standards) (23),
- teacher training (28), and
- revising assessment standards (19)
- Most policies combine at least one or more areas (e.g. programme delivery, reference documents, teacher training, assessment standards) in a single policy.
- Programme delivery and teacher training are the areas where policies more often succeed earlier in embedding digital competence.

Teacher training (D)

n total 28 policies

Assessment (C)

In total: 19 policies

In total: 64 policies identified

In total: 21 policies

embed digital

competence:



National policies on digital competence

| Areas | Actions taken | Factors to be considered |
|----------------------|--|---|
| Programme delivery | introducing new subjectsrevising pedagogical material | IVET providers often have considerable autonomy to design programmes. |
| Reference documents | revising/updating qualification standards and learning outcomes for qualifications | changes need time to have an observable impact |
| Teacher training | providing opportunitiesfor additional training ofteacher staff (CPD)setting up supportstructures | teachers' willingness tocontinuously update their skillsteachers' pre-existing digitalcompetence |
| Assessment standards | - revising assessment standards | setting assessment standards is often decentralised and dominated by occupation-specific competences |

What is your guess and why

How is digital competence included in: reference documents, delivery of IVET programmes, assessment?

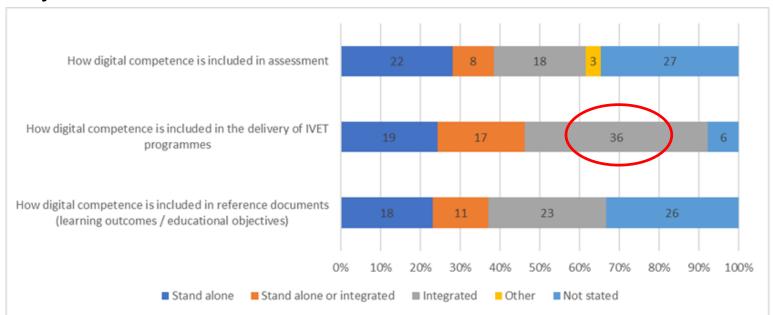
E.g. is it included as a **stand-alone unit** or is it **integrated** in other learning outcomes/learning objectives?



2. Layer: Qualification types78 qualification types identified

Inclusion of digital competence

- In the 78 qualification types that comprise all IVET qualifications in the EU+ countries, the most prominent way to include digital competence is to **integrate** it with other job-specific subjects instead of including it as stand-alone unit.
- In 36 qualification types (47%) digital competence in IVET delivery is integrated in other subjects. E.g. in Germany, in work-based VET, digital competence usually integrated in the profession-oriented subjects.

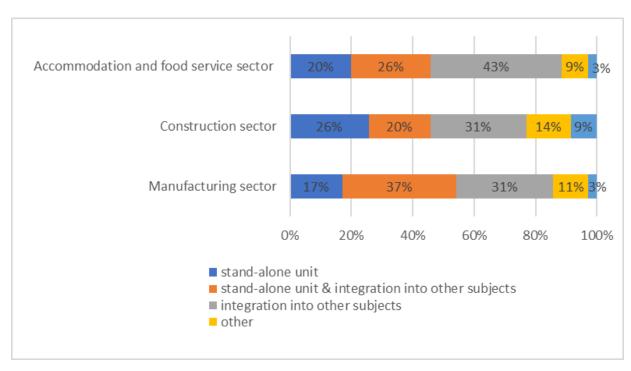




3. Layer Individual programmes: 105 in total 35 per sector (3 sectors)

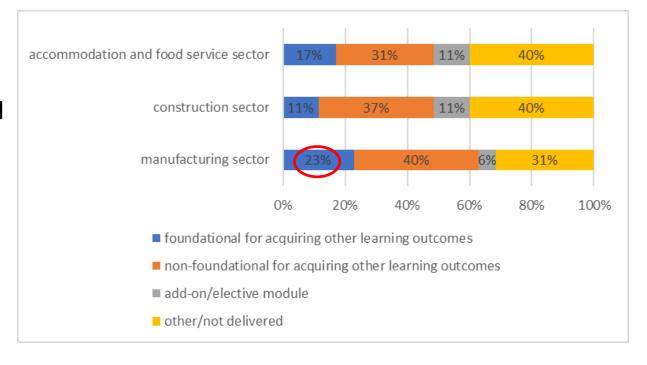
Accommodation and food sector (waiter/waitress)
Manufacturing sector (welder)
Construction sector (bricklayer)

- In all 105 programmes, digital competence is most frequently **delivered as integrated** in other subjects (35%), though with sector variations.
- More often in the accommodation and food service sector it is delivered as integrated (43%).
- The **delivery mode** of digital competence largely depends on the individual teachers and trainers: they decide on how to integrate digital competence in their classes.



In most programmes of all three sectors, digital competence is more often **non-foundational** for acquiring other learning outcomes.

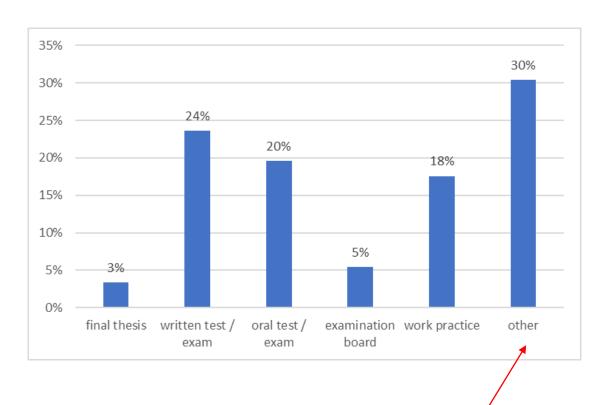
In the manufacturing sector, digital competence is **foundational** for other modules in 23% of programmes



Digital competence is assessed in 81% of the 105 training programmes, and not assessed in 18% of programmes.

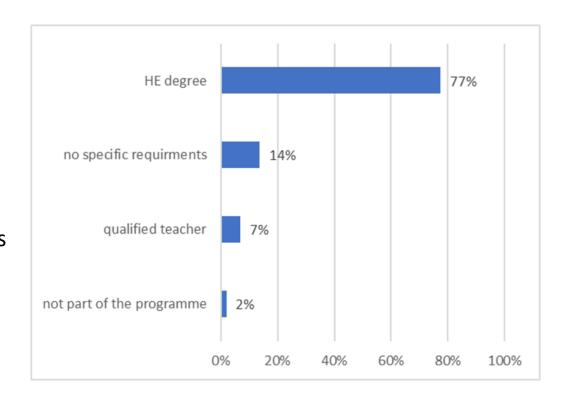
In one programme (1%), some digital competences may be assessed although this is not obligatory.

Digital competence is most rarely assessed in the construction sector (29%).

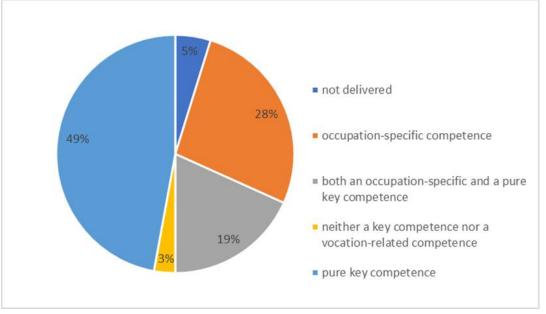


Assessed together with other modules

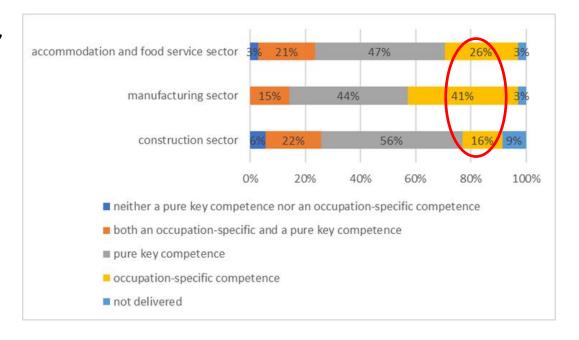
- Most teachers of digital competence have a higher degree (77%) in education, informatics or a related discipline
- In 14% of all programmes, teachers of general or occupation-specific subjects are not required to have education and training in digital competence but are assumed to be capable of using digital tools in their teaching practice.



- In 49% of programmes, digital competence is considered to be a pure key competence.
- In 28% of programmes, it is seen as an occupationspecific competence.
- In 19% of programmes, digital competence is perceived to be both: a pure key competence and an occupation-specific competence



- In the manufacturing sector, digital competence is most often perceived as an occupation-specific competence (41%) compared to
- 26% in the accommodation and food service sector, and to
- 16% of programmes in the construction sector.



Conclusions in relation to how digital competence is currently embedded in IVET

- IVET systems **already included** key competences e.g. digital competence in some form before the 2006 Recommendation and the publication of other EU agenda-setting documents (Bruges and Riga).
- Rather than introduce something new, the studied policies aimed to reform an element within the existing situation.
- Changes observed in the way that digital competence is embedded in reference documents and assessment standards show that these tend to be more complex than in other areas as these often depend on a broader variety of stakeholders (outside the education sector).
- Changing the way digital competence is embedded in teacher training tends
 to materialise more successfully within a shorter timeframe, due to a
 combination of targeting both pre-service and in-service teacher training,
 which allows a swifter response to changing demands.

Discussion

 Which study results are particularly useful for policymakers and should be emphasised in the research paper Cedefop will publish following this workshop?

