



Revised European handbook on the definition and writing of learning outcomes

The relevance to national VET curricula?

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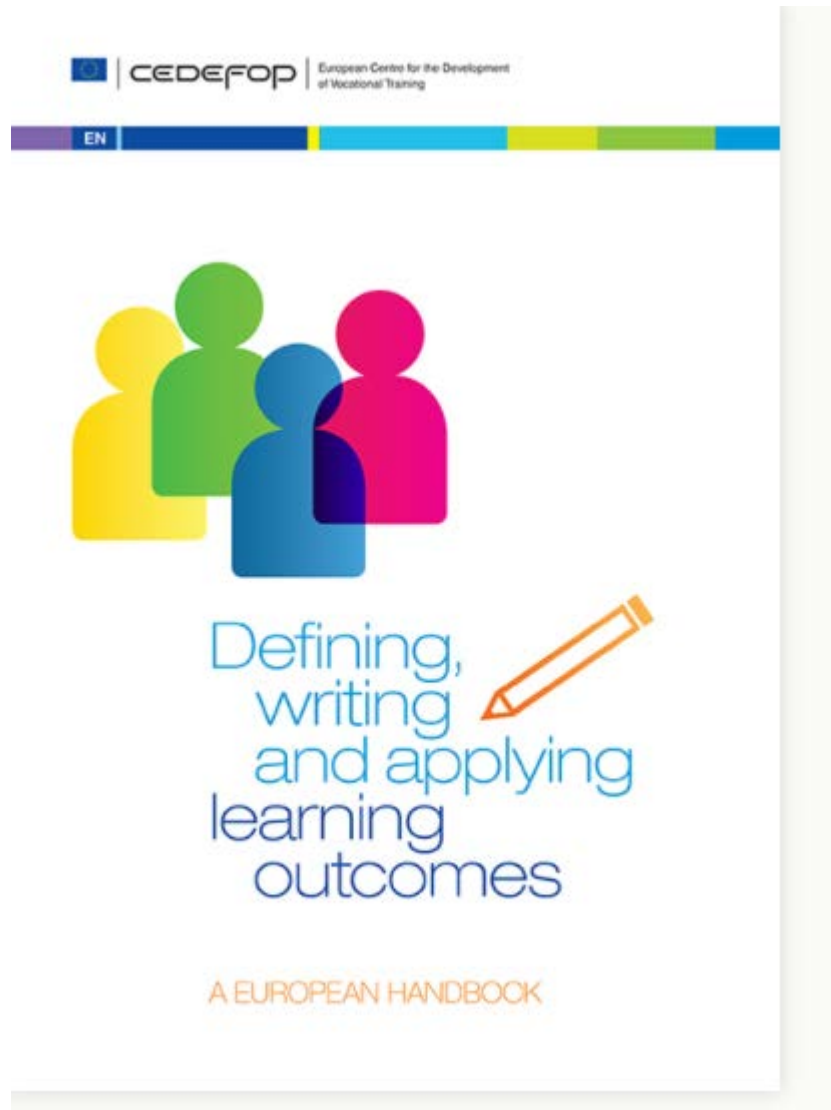
4th Policy Learning Forum on learning outcomes, 27-28 June 2022



CEDEFOP

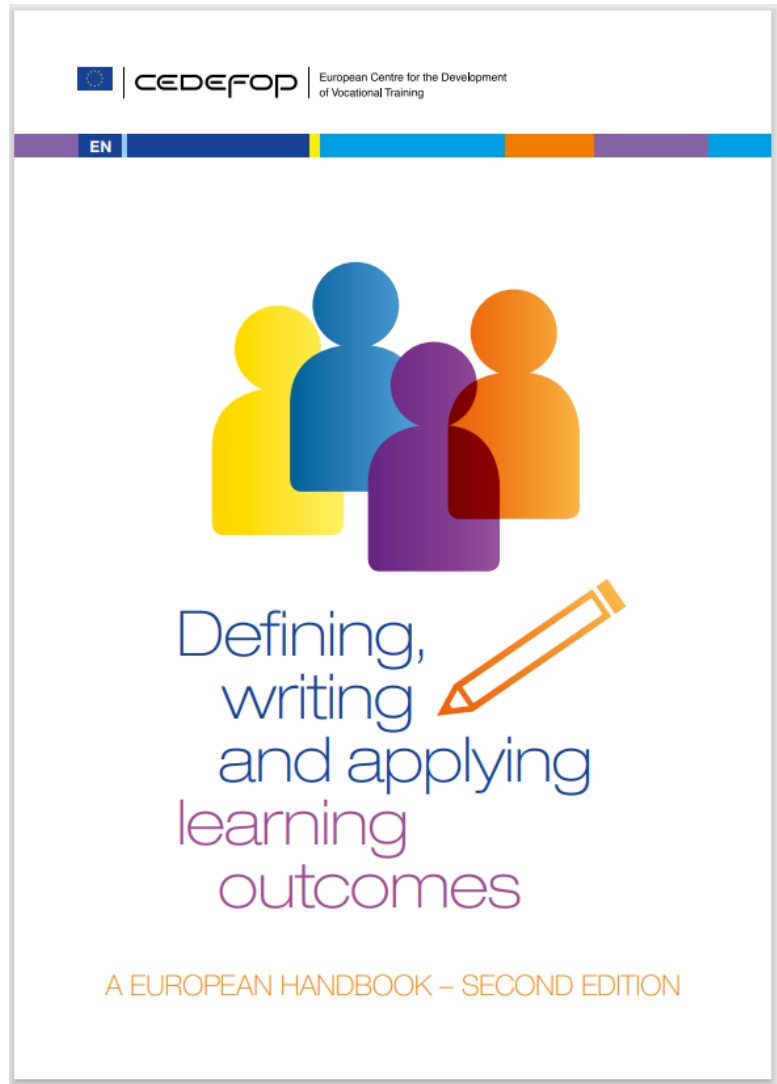
European Centre for the Development
of Vocational Training

The 2017 European handbook – key messages

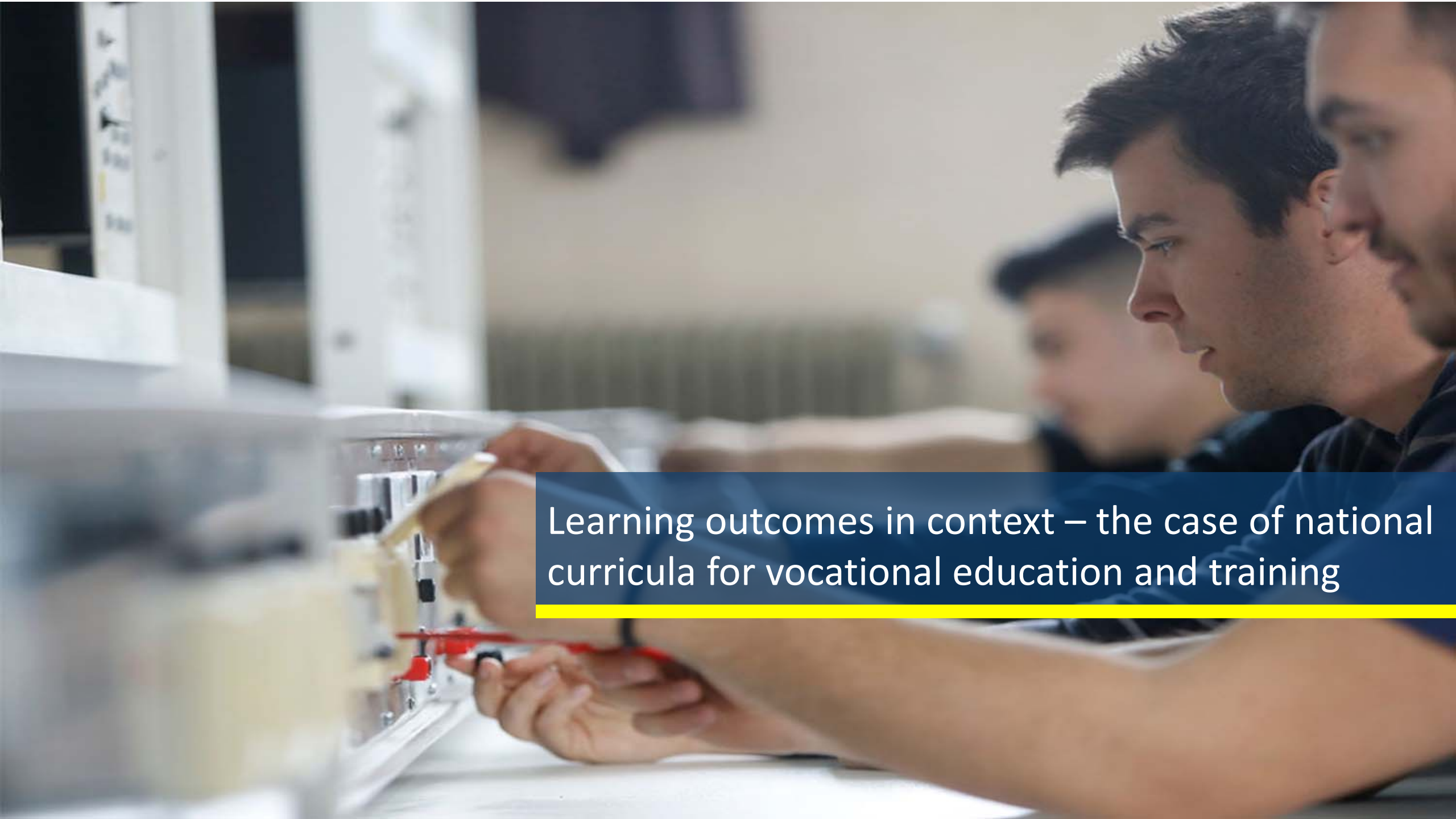


- ✓ The shift to learning outcomes has **gained speed**
- ✓ Learning outcomes are used in **different ways** so there is a need to identify the strengths as well as weaknesses of the approach
- ✓ Learning outcomes are used for many **purposes** and the alignment between these need to be addressed

The 2022 European handbook – reinforced messages



- ✓ The learning outcomes approach is generally **accepted** and **adopted** across Europe – its application varies significantly
- ✓ The policy impact of learning outcomes makes it increasingly important to focus on strengths as well as **weaknesses**
- ✓ More than before a need to provide practical guidance based on **mutual learning** and **systematic research**



Learning outcomes in context – the case of national curricula for vocational education and training

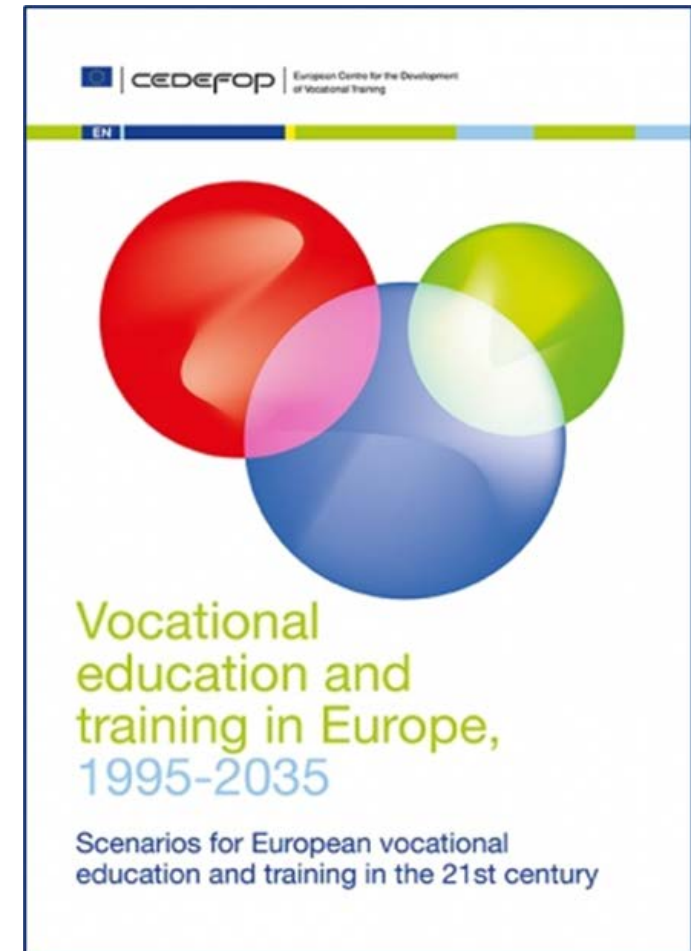
National VET curricula - translating labour market demand into VET supply

- ✓ National VET curricula stand out as **key instruments** for coordinating and governing VET.
- ✓ The need to articulate how **labour market demand** can be translated into VET **supply** – in the form of *teaching* and *learning*
- ✓ The last 25 years have seen a change
 - A **systematic application** of the learning outcomes approach
 - A gradual move from the “**teaching curricula**” to the “**learning curricula**”
 - drawing attention to the outcomes rather than the inputs

National VET curricula - articulating the changing content of VET

Cedefop's 'Future of VET study' has analysed how the content of national VET curricula has changed **over the last 20 years**

- ✓ The focus on **occupational skills** remains stable/limited increase
- ✓ An increased focus on **general knowledge**
- ✓ **Transversal skills and competences** have become more visible
- ✓ Overall an increase in the emphasis on **workplace learning**



Learning outcomes – a balancing act

- ❖ The way learning outcomes are **written** influences the **balancing** of general subjects, occupational skills and transversal skills and competence
- ❖ The comparison of **German** and **Greek** (2013) curricula illustrates the potential implications
- ✓ The expectations towards a German car-mechanic apprentice is indicated by verbs like **read, reflect, make work, explain** and **use** – underlining the need to be able to work independently and take responsibility
- ✓ The expectations towards the Greek (2013) car-mechanic is indicated by the ability to **describe knowledge** focussing on the ability to recall and reproduce taught content

CHAPTER 4

National curricula: dilemmas and opportunities

The purpose of this chapter is to illustrate and analyse in more detail the dilemmas and opportunities involved in defining and describing learning outcomes for national curricula. Using examples from vocational education and training in Germany, Greece and Norway, the chapter points to similarities as well as differences in the application of learning outcomes at this level. The lessons from this comparative exercise will eventually inform the 'rules of thumb' provided in the final part (IV) of this handbook. All the three cases cover EQF/NQF level 4 qualifications, addressing retail, e-commerce, automobile mechanics and construction. While the German and Greek cases address the national VET curricula in general, the Norwegian case illustrates the way the subject of mathematics has been integrated into overall VET programmes.

4.1. German framework (national) curricula for retail and e-commerce

In Germany, federal framework curricula (*Rahmenlehrpläne*) orient the content and profile of VET programmes⁽¹⁹⁾. A German framework curriculum is based on the following elements:

- a general part describing the mandate and goals of vocational education and training, notably explaining the concept of *Handlungskompetenz* (competence to act);
- a listing of the different general learning fields and specialisations within the programme⁽¹⁹⁾;
- a detailed description of the different learning fields and the expectations of learners.

⁽¹⁹⁾ Resolution of the Conference of Ministers for Education of 12 March 2015 on the [Framework Agreement on Vocational Schools](#) (version of 9.9.2021).

⁽¹⁹⁾ This can differ within curricula; for retail, this constitutes a listing of 14 different learning fields with 880 work hours overall within a 3-year programme.

A young man with long blonde hair, wearing a dark blue knit beanie with a red pom-pom and a grey sweater, is focused on operating a DJ mixer. He is surrounded by other people in a dimly lit, vibrant environment, likely a nightclub or music venue. The background is filled with blurred lights and the silhouettes of other individuals.

How can the 2022 handbook be used to support the definition, writing and renewal of national curricula?

Three focal points for defining, writing and reviewing learning outcomes

1

The **breadth and scope of expected learning**
(in qualifications frameworks the horizontal dimension)

2

The **expected complexity and level of expertise**
(in qualifications frameworks the vertical dimension)

3

The **balancing of specificity and generality**

1. The breadth and scope of learning – the horizontal dimension

Writing learning outcomes requires

- ✓ To define the **content** and **borders** of learning domains;
- ✓ To decide on which parts of **occupational skills** to address;
- ✓ To be able to distinguish between **limited tasks** and **broader occupational**;

The domains of qualification frameworks supports this work, but this is not sufficient



Images by Pexels from Pixabay

1. Defining the breadth and scope of domains – the need for terminological reference points

Defining domains of learning requires an unpacking of terminology

- ✓ We need **terminological reference points** for education, for occupation and for general and transversal skills
 - ✓ EQF/NQF
 - ✓ ISCO/NACE/ISCED
 - ✓ ESCO/O*Net
 - ✓ Competence frameworks
- ✓ The purpose is not to impose particular terms, but to **clarify** which aspects to choose from.
- ✓ The handbook provides **links** to these reference points

The associated single concepts listed in the following illustrate the orientation of this category.

Communicating <ul style="list-style-type: none">• Moderate discussions• Resolve conflict• Negotiate• Promote ideas, products, services• Report	Supporting others <ul style="list-style-type: none">• Show empathy• Ensure customer orientation• Coach, mentor or advise others• Teach, train or instruct others
Collaborating in teams and networks <ul style="list-style-type: none">• Interact with others• Build and maintain networks• Work in teams• Demonstrate intercultural competence	Leading others <ul style="list-style-type: none">• Delegate responsibilities• Motivate others• Build team spirit
Following ethical code of conduct <ul style="list-style-type: none">• Comply with regulations• Respect confidentiality obligations• Demonstrate loyalty• Demonstrate trustworthiness	

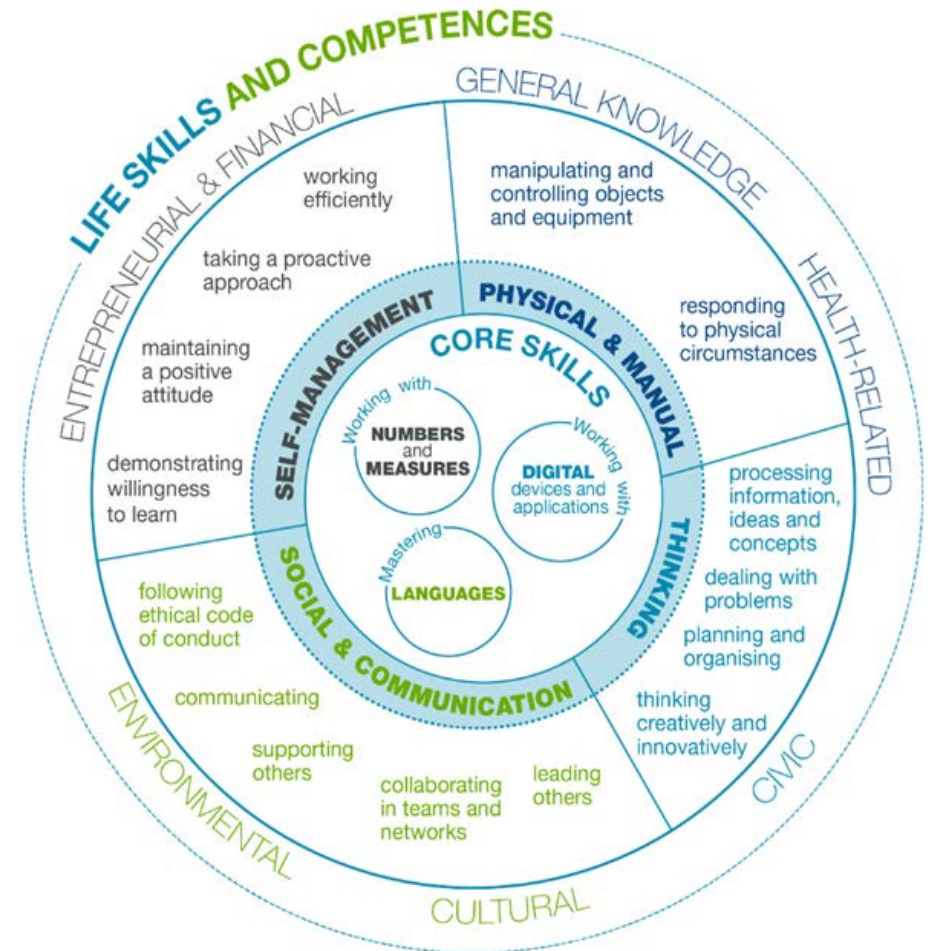
7.3. The future role of ESCO

Transversal skills and competences point to the general need for learning outcomes statements to be able, when needed, to balance between general knowledge, occupationally specific and transversal skills and competences. The updated ESCO terminological tool provides important terminological support, in 27 languages, to this balancing act. In addition to the terminology on transversal skills and competences outlined in this chapter, ESCO now provides a dictionary of more than 13 000 occupationally related skills and competences covering close to 3 000 occupations. ESCO will not be the tool for setting priorities and for balancing learning outcomes, but it does provide an important resource supporting this process.

1. Defining the breadth and scope of learning – unpacking transversal skills and competences

- Transversal skills and competences are **terminological constructs**, not easily observable
- The proposed ESCO/EQF terminology points to the different aspects of these skills and competences; making it easier to identify and prioritise for example **social and communication skills**.
- Is the focus on
 - communicating,
 - supporting others
 - working with others in a team or networking,
 - leading others??

TRANSVERSAL SKILLS AND COMPETENCES



2. The depth and complexity of learning outcomes – the vertical dimension

Writing learning outcomes requires

- ✓ Using **action verbs** in a systematic and reflected way
- ✓ Description of context when articulating **depth** and **complexity**
- ✓ Making use of qualifications frameworks and their vertical dimension supports the writing of LO for **other purposes**
- ✓ Referring to **existing taxonomies**, for example Bloom and SOLO
- ✓ Distinguishing between **declarative knowledge** (Knowing What - facts) and **procedural knowledge** and skills (knowing HOW – demonstrating skills and competences competences)

Table 14. Exemplifying the vertical dimension of learning outcomes: the increasing complexity of autonomy and responsibility (EQF descriptors)

	The learner	The action	The object	The context
EQF level 3	Learner is expected...	<ul style="list-style-type: none"> • to take responsibility for 	<ul style="list-style-type: none"> • completion of tasks in work or study 	adapting own behaviour to circumstances in solving problems
EQF level 4	Learner is expected...	<ul style="list-style-type: none"> • to exercise self-management • to supervise • take some responsibility • evaluate and improve 	<ul style="list-style-type: none"> • routine work of others • work or study activities 	within the guidelines of work or study contexts that are usually predictable, but are subject to change
EQF level 5	Learner is expected...	<ul style="list-style-type: none"> • to exercise management, supervise, review • develop 	<ul style="list-style-type: none"> • performance of self and others 	in contexts of work or study activities where there is unpredictable change

Source: European Parliament; Council of the EU (2008).

2. Depth and complexity – key building blocks

Ambiguous		Precise	
<ul style="list-style-type: none"> • Know • Understand • Enjoy • Determine • Appreciate 	<ul style="list-style-type: none"> • Grasp the significance of • Become familiar with • Believe • Be aware of • Comprehend 	<ul style="list-style-type: none"> • Distinguish between • Differentiate • Assemble • Adjust • Identify • Solve 	<ul style="list-style-type: none"> • Write • Recite • Construct • Contrast • Compare • List

Declarative verbs	Procedural/relational verbs
<ul style="list-style-type: none"> • repeat • describe • identify • memorise • recall 	<ul style="list-style-type: none"> • reflect • hypothesise • solve unseen problems • generate new alternatives

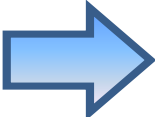
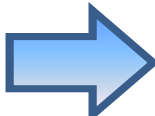
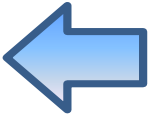
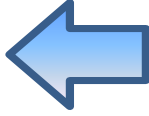
3. The balancing of specificity and generality

When writing learning outcomes you must

- ✓ Avoid **too detailed and prescriptive** statements as this reduces the scope for adaptation and risks a ‘dumbing down, for example by prioritising
 - ✓ directly observable tasks
 - ✓ exact and ‘objective’ measurement
- ✓ **Avoid too general, vague and ambiguous** statements failing to orient teachers and learners
- ❖ The balancing of **specification/prescription** and **openness/intended ambiguity** is critical
- ❖ The balancing must address the **need for adaptation and innovation** – both for learners and teachers

3. The balancing of specificity and generality

The balancing directly influences the **transformation of intended learning outcomes to actually achieved outcomes** – through teaching and learning

Teaching/learning	Intended learning outcomes	Assessment tasks
 Designed to generate or elicit desired verbs in large classes, small classes, groups or individual activities. Such activities may be: <ul style="list-style-type: none"> • teacher managed; • peer managed; • self-managed. As best it suits the ILO 	Incorporate verbs that students have to enact as appropriate to the context <hr/> The very best outcomes that could reasonably be expected containing verbs such as hypothesise, reflect, apply, relate to principle, etc. <hr/> Highly satisfactorily outcomes containing phrases such as solve expected problems, explain complex ideas, apply to professional practice <hr/> Quite satisfactory outcomes containing phrases such as solve basic problems, explain basic ideas and use standard procedures <hr/> Minimally acceptable outcomes and applications; inadequate but salvageable higher level attempt	 Format of tasks such that the target verbs are elicited and deployed in context Criteria specified clearly to allow judgement of student's performance 

Rules of thumb informing the definition and writing of learning outcomes



Principles to be applied

- ✓ The **learner** must always – irrespective of the purpose and level of detail – be at the centre;
- ✓ **Simplicity** is important when writing learning outcomes. Length is no guarantee of precision;
- ✓ Writing learning outcomes is an **iterative process**, starting from overall objectives and moving stepwise towards specific statements;
- ✓ Writing learning outcomes depends on **dialogue**;
- ✓ Writing learning outcomes is **never neutral**; the purpose and context must be transparent to learners and teachers.

CHAPTER 9

Rules of thumb in defining and writing learning outcomes

While learning outcomes promote overall transparency and help to clarify the intentions of learning processes, they do not replace considerations of what are the most accurate inputs to the learning process. Learning outcomes should not be used in isolation but complement and add value to existing input-oriented perspectives.

9.1. The fundamentals

Using learning outcomes represents a perspective and a mode of thinking. The focus is always on the learner and what he/she is expected to know, be able to do and understand.

- When writing learning outcomes, the learner is always – irrespective of the purpose and level of detail – put at the centre.
- Intentional and (actually) achieved learning outcomes are distinguished. The former are statements of intentions and expectations, the latter can only be identified following the learning process, through assessment and demonstration of achieved learning in real life, for example at work.
- Improving the way learning outcomes are defined, described and used requires continuous dialogue (the feedback loop) between intended and actual outcomes. The experiences from actually achieved outcomes should be used systematically to improve statements of intentions, as for example found in curricula.
- Learning outcomes help to clarify intentions and provide a reference point for judging learning achievements. Not all learning, however, can be fully defined in learning outcomes. The learning process can rarely be fully predicted and described; it has intended as well as unintended, desirable as well as undesirable outcomes.
- Learning outcomes must remain open to the explorative and to what has yet to be experienced and articulated.
- learning outcomes never operate in isolation but must be defined and

Principles to be applied



- ✓ **Not all learning** can be fully defined in learning outcomes.
- ✓ The learning process can **rarely be fully predicted and described**.
- ✓ Learning outcomes must remain **open** to the explorative and to what has yet to be experienced and articulated.
- ✓ **Different needs must be acknowledged** – some areas require tangible and observable outcomes; others will require generic descriptions

Principles to be applied

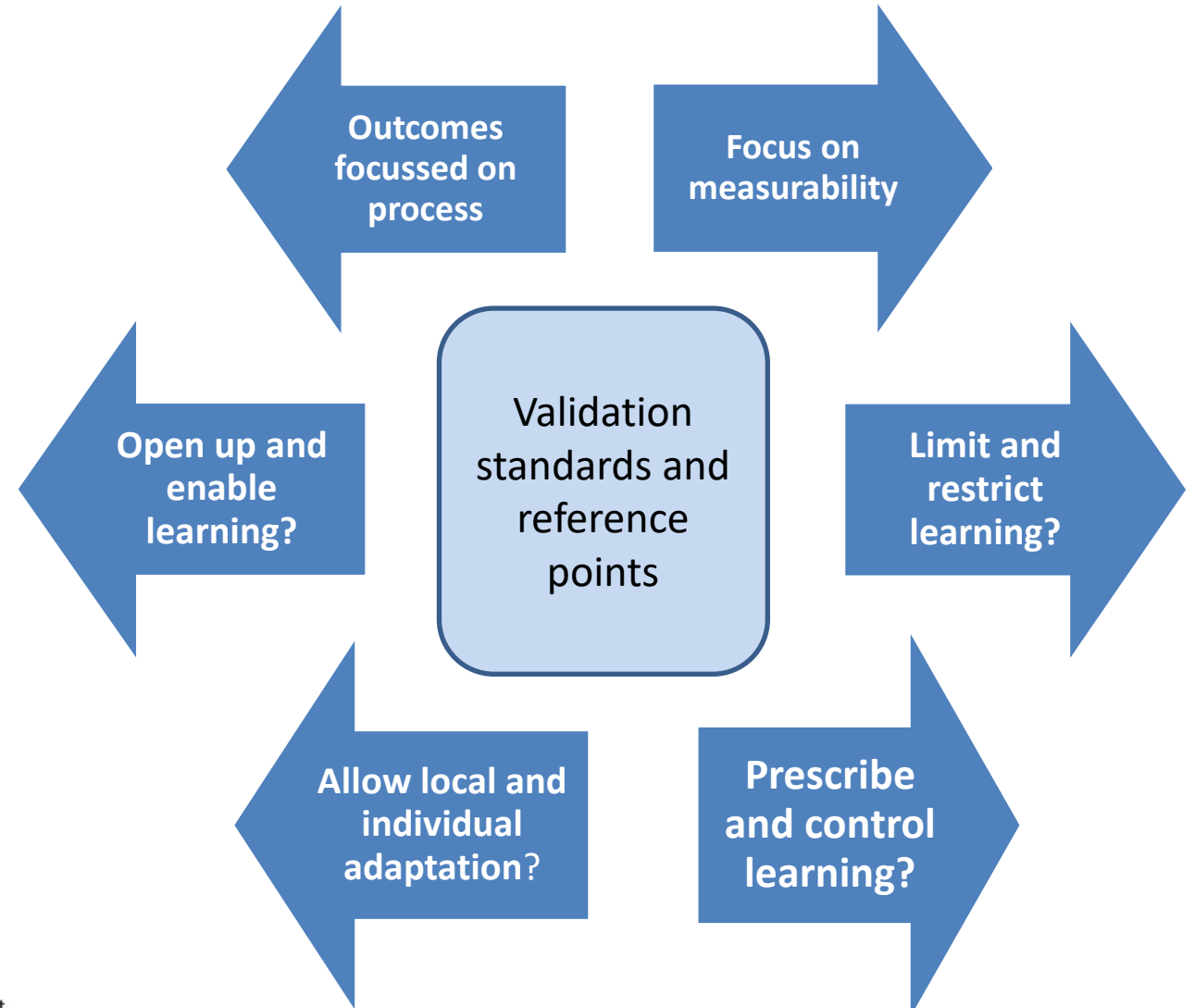
- ✓ Learning outcomes are written for a **range of different purposes** – their alignment is important. Do for example national curricula reflect the outcomes of the NQF?
- ✓ The **quality** of learning outcomes – long term – depend on the **review and renewal process** and a systematic **dialogue** and **exchange** between stakeholders

Table 2. Learning outcomes level descriptors (exemplified by levels 4 and 5) used in the Polish qualifications framework

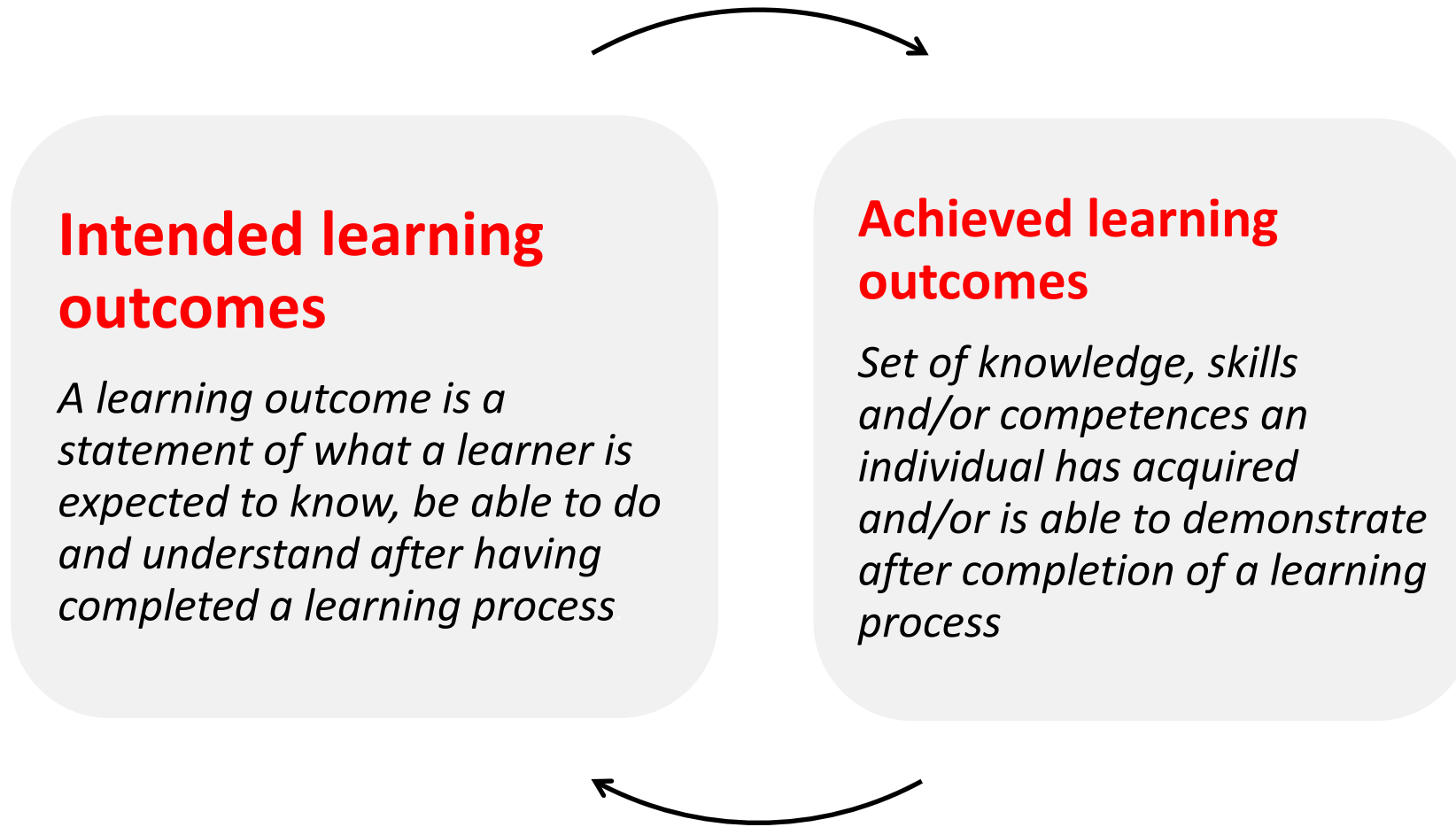
Level 4	Level 5
KNOWLEDGE	
In the areas of learning, creativity and professional activities, a person has knowledge and understanding of:	
<ul style="list-style-type: none"> • a broadened set of basic facts, moderately complex concepts and theories, as well as the dependencies between selected natural and social phenomena and the products of human thought • a broader scope of selected facts, moderately complex concepts, theories in specific areas and the dependencies between them • the basic conditions of conducted activities 	<ul style="list-style-type: none"> • a broad scope of facts, theories, methods and the dependencies between them • the diverse conditions of conducted activities
SKILLS	
In the areas of learning, creativity and professional activities a person is able to:	
<ul style="list-style-type: none"> • complete moderately complicated tasks, partially without instruction, often under variable conditions • solve moderately complex and somewhat non-routine problems often under variable conditions • learn autonomously in a structured form • understand complex statements, formulate moderately complex statements on a broad range of issues • understand and formulate simple statements in a foreign language 	<ul style="list-style-type: none"> • complete tasks without instruction under variable, predictable conditions • solve moderately complex and non-routine problems under variable, predictable conditions • learn autonomously • understand moderately complex statements, formulate moderately complex statements using specialised terminology • understand and formulate very simple statements in a foreign language using specialised terminology
SOCIAL COMPETENCE	
<ul style="list-style-type: none"> • assume responsibility for participating in various communities and functioning in various social roles • act and cooperate with others autonomously under structured conditions • evaluate one's own actions and those of persons one is directing • take responsibility for the results of one's own actions as well as those of the persons one directs 	<ul style="list-style-type: none"> • assume basic professional and social responsibilities, evaluate and interpret them • independently act and cooperate with others under structured conditions, direct a small team under structured conditions • evaluate one's own actions and those of others and the teams one directs; assume responsibility for the results of those actions

NB: The Polish qualifications framework (PQF) forms an integrated part of the Polish qualification system formally adopted by the Polish Parliament on the 22 December 2015 and came into force in January 2016. Source: Sławiński, (2013, p. 38).

Key principles – addressing contradictions and tensions



The (critical) learning outcomes feed-back-loop



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