

The impact of learning outcomes on teaching and learning

Concept Note

13 June 2025

Introduction to the study

Over the past two decades, European education and training systems have progressively adopted learning-outcome-based approaches, which emphasise what learners are expected to know, understand, and be able to do at the end of a learning process. This marks a shift from the traditional **input-based approaches**, which prioritise learning duration, teaching hours, and content coverage rather than actual competences acquired. This learning-outcome-based approach enhances qualifications' transparency, comparability, and relevance by defining expected learning outcomes rather than prescribing how knowledge should be delivered. It also promotes a learner-centred education and training system that better aligns with labour market and societal needs.

Research has confirmed that learning outcomes are increasingly embedded in national qualifications frameworks, vocational education and training (VET) programme design, curricula and assessment criteria, and serve as a cornerstone of European education and training policies ⁽¹⁾. However, while learning outcomes statements are increasingly established in policy documents and qualification standards, their direct impact on teaching, learning, and assessment remains an area requiring further investigation, particularly regarding classroom-level and work-based learning implementation.

The Cedefop study *The shift to learning outcomes: rhetoric or reality?* seeks to bridge this gap by analysing how learning outcomes are transformed in schools and apprenticeships, focusing on initial vocational education and training (IVET). The study examines how **intended learning outcomes** are translated into **achieved learning outcomes**.

The research builds on in-depth analysis in 10 selected Member States: Bulgaria, Finland, France, Ireland, Lithuania, Malta, the Netherlands, Poland, Portugal, and Slovenia. The study made use of desk research, interviews with key stakeholders, a cross-cutting survey, and, in countries analysed, site visits to VET providers, interviews with key VET stakeholders at the national level, and focus groups and lesson observations. Findings are analysed and synthesised into comparative reports ⁽²⁾.

¹ For more information see: <https://www.cedefop.europa.eu/en/projects/learning-outcomes>

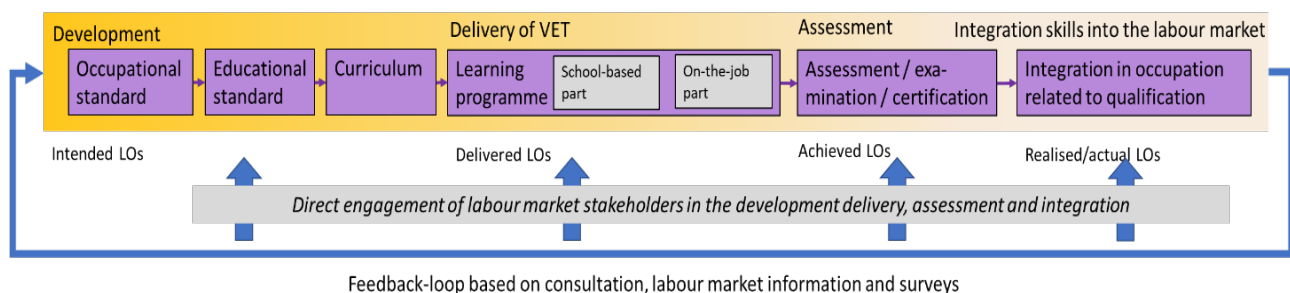
² One report is already publicly available: Cedefop. (2024). *The influence of learning outcomes on pedagogical theory and tools*. Publications Office of the European Union. Cedefop research paper.

Key definitions:

Intended learning outcomes are written statements and expressions of intentions/desired targets of learning, usually expected to reflect labour market needs. They describe what learners are “expected to know and be able to do and understand having completed a learning sequence, a module, a programme or a qualification” (Cedefop, 2022, p. 18).

Achieved learning outcomes are those that an individual learner demonstrates at the end of a learning process. This is determined as part of student assessment. Learners take the achieved learning outcomes as they enter the labour market and develop themselves through their work and in lifelong learning.

The transformation process from intended learning outcomes to achieved learning outcomes involves several steps, from defining intended learning outcomes in qualifications and curricula, delivering these through school- and work-based learning, to assessing achieved outcomes. Previous studies have highlighted that learning outcomes serve as a mechanism for continuous dialogue between education and the labour market. Therefore, the process should also engage labour market stakeholders in closing the loop along the pathway towards achieving learning outcomes, incorporating labour market insights into the definition of intended learning outcomes. The process is illustrated in the figure below.



It should be emphasised that this process is not linear but rather complex, requiring alignment across multiple governance levels. Policy development is not merely a top-down process but an iterative one, involving numerous stakeholders with different priorities and interests. Its effectiveness depends on various factors that may either support or hinder the process, shaping how stakeholders understand and implement the approach, and how they collaborate to integrate learning outcomes into practice.

To explore how this process unfolded in the 10 Member States analysed, the study examined how and to what extent learning outcomes were integrated into teacher training, school-based and work-based learning, and assessment. The study considered three perspectives:

1. **Macro/policy level** – examines national policies and frameworks shaping the use of learning outcomes.
2. **Meso/institutional level** – focuses on VET schools and training companies applying learning outcomes in curricula and training programmes.
3. **Micro/classroom level** – analyses how teachers and trainers integrate learning outcomes into daily teaching and assessment practices.

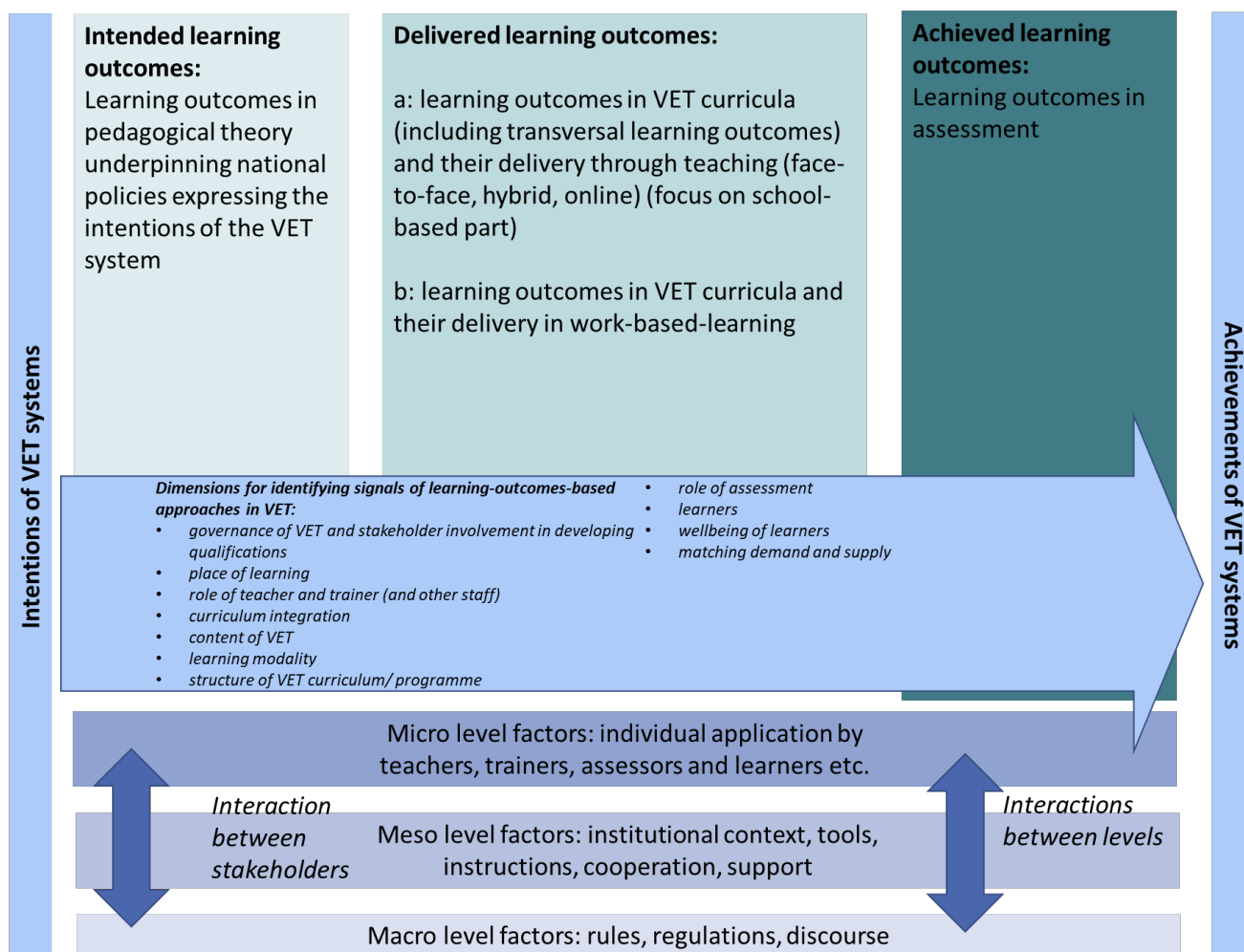
Recognising that the shift towards a learning outcomes approach required more than formal changes in documentation, the study explored its systemic impact on the national VET system. To assess the extent to which outcome-based approaches were replacing input-based models across the dimensions and levels of the VET system investigated, the analysis relied on multiple signals aimed at capturing shifts in programme delivery, assessment strategies, and learning achievements. These signals provided insights into what was learned, how it was learned, where it was learned, who supported the learning process, and the outcomes of a learning outcomes-based approach.

The presence (or absence) of such signals has served as the basis for investigating the extent to which the learning outcomes approach is effectively used in the VET system. Insights of the study findings are presented in the section below.

Signals	Implications of using a learning outcomes approach
Governance of VET and stakeholder involvement in developing qualifications and delivering VET	Labour market actors are involved in defining intended learning outcomes. This should be based on a feedback loop between the labour market and the VET system, ensuring that the demand and supply of skills and skilled workers are aligned. A well-functioning feedback loop ensures that the VET system remains fully aware of labour market demands. This approach should enhance the ownership and responsibility of labour market stakeholders, not only in defining the expected outputs of the VET system but also in evaluating its realised outcomes.
Place of learning	Learning outcomes-based approaches emphasise the independence of outcomes from the pathway to achieving them. This allows for greater flexibility in delivery and the inclusion of different learning environments, including workplaces, online platforms, and hybrid models. In this context, learning can take place in more adaptable settings, enabling students to acquire skills in real-world contexts.
Role of a teacher and trainer (and other staff)	Teachers shift from being instructors to facilitators, supporting active learning. They have greater freedom to adapt lessons to students' needs and to use different teaching and assessment methods. Teachers also have more autonomy in their decisions regarding teaching and learning. For instance, while intended outcomes described in qualification standards and curricula are often relatively specific, teachers can add, remove, or adjust learning outcomes during delivery to respond to students' immediate needs. This evolving role should be matched with increased efforts to prepare teachers and trainers for these responsibilities.
Role of a learner	The learning outcomes approach is learner-centred. Students are encouraged to take responsibility for their own learning, develop problem-solving skills, and actively participate in shaping their education.
Curriculum integration and content of VET	Instead of being structured around subjects, VET programmes focus on developing skills and competences, integrating theoretical knowledge with practical application.
Learning modality	Teaching and instruction methods are not predefined but are selected based on intended learning outcomes. Lessons prioritise hands-on learning, such as project-based and problem-solving activities, over traditional lecture-based instruction.
Structure of VET curriculum/ programme	VET programmes are increasingly modular, allowing greater flexibility in how modules can be combined and enabling the recognition of prior learning.
Role of assessment	A learning outcomes-based approach allows for the collection of evidence to compare intended learning outcomes with learner performance. Assessment criteria provide a reference point for these evaluations, reinforcing the use of criterion-referenced rather than norm-referenced measures. Assessment results help track individual progress and achievement of learning goals.
Inclusion	VET becomes more inclusive, offering flexible learning options for different groups, including adult learners and those with diverse learning needs. This inclusivity is closely linked to modular VET programmes, which provide greater adaptability to different learning pathways.
Wellbeing of learners	Clear expectations of what will be achieved through learning reduce stress, while personalised learning approaches help students stay motivated and engaged.
Matching demand and supply	VET programmes better prepare learners for the labour market by responding to the needs of both employers and learners, effectively closing feedback loops and ensuring a better match between education and employment requirements.

The graph below brings all perspective together, and presents the framework used in the study to investigate the shift towards a learning outcome approach.

Aim: to map and analyse the transformation of intended learning outcomes into achieved learning outcomes



Compare different country situations and reflect on overarching dynamics and conclusions

Key findings from the study

Learning outcomes in teacher training

- Learning-outcomes-based approaches stem from different educational traditions, leading to **varied conceptualisations** across countries. These differences shape how learning outcomes are interpreted, integrated into pedagogy, and applied in teacher training. There is **no single, universally accepted method** for incorporating learning outcomes into VET systems.
- The **extent to which learning outcomes are reflected in the pedagogical theories underpinning VET teacher training programmes differs notably** across the countries studied, with some having an explicit link between learning outcomes and pedagogical theory, with clear references in learning modules, tasks and curricula. On others, learning outcomes are implicitly embedded, meaning that while not overtly stated, they underpin the overall structure and delivery of training. In half of the countries analysed, however, no link was identified, indicating limited theoretical alignment.
- Interviews with training providers reveal overall support for using learning outcomes. However, several providers express dissatisfaction with the quality and practicality of implementation, particularly the **vagueness or prescriptiveness of learning outcome statements** and the **gap between theory and real-world application**.
- Training providers enjoy significant **autonomy in defining the content** of teacher training. Most have taken the initiative to introduce learning outcomes independently, as none of the 10 countries studied mandate specific pedagogical approaches. Only Malta offers national-level guidance on how to present learning outcomes in teacher training.
- Despite the lack of theoretical references in several countries, the learning-outcomes-based approach **is still presented in practice to future VET practitioners in almost all countries studied**. Survey results show that over 75% of VET teachers and trainers were introduced to aspects of such an approach during their training. However, only 50% felt adequately prepared to work with learning outcomes-based curricula, with 39% reporting feeling unprepared, suggesting insufficient depth and consistency in training provision. Despite limited theoretical integration, more than two-thirds of surveyed VET teachers reported that learning outcomes have influenced their teaching.
- Many teachers are **still not explicitly taught** about the learning-outcome-based approach in a holistic way, even though their teacher education may cover learner-centred teaching and assessment methods. Many teachers do not receive appropriate continuing professional development. The **lack of a systematic approach to all aspects of the learning-outcomes-based approach** appears to constitute an important implementation gap in many VET systems and may partly account for the relatively slow progress observed in respect of shifts in pedagogies

Learning outcomes in teaching practices

- Countries analysed are at different stages of integrating learning outcomes into VET policies and curricula. The process of **embedding learning outcomes into VET delivery is inherently long-term**. Early adopters (e.g. countries reforming before the 2000s) have more fully integrated systems, where learning outcomes underpin qualifications and teaching. In contrast, more recent adopters continue to rely on input-based structures alongside emerging learning outcomes practices.

- Reforms usually begin nationally, with learning outcomes guiding the design of qualifications and programs linked to national frameworks. While national progress is robust, implementation at the school and classroom levels is slower.
- **Progress within schools and among teachers has been slower**, as these reforms require stakeholders to embrace new pedagogical concepts and shift established teaching practices. Nonetheless, the study finds that learning outcomes have begun to shape classroom teaching, supporting student-centred teaching, modular learning structures and diverse learning environments, including work-based settings.
- The **pedagogical uptake of learning outcomes appears stronger in classroom practice than in broader school planning**. In many countries, teachers are more advanced in applying learning outcomes than school leadership, often relying on their professional autonomy and prior training in learner-centred methodologies.
- Despite the systemic nature of these reforms, no major public or professional debate has accompanied their introduction. This may be due to the technical nature of qualifications frameworks and a perception that pedagogy falls within teachers' professional domain. Moreover, learner-centred approaches have long been established in teacher education, which may explain why the **shift to learning outcomes is often seen as a continuation rather than a disruption**.
- A key barrier to implementation is the **limited systematic support for schools and teachers**. National reforms have focused on frameworks and qualifications, while investments in teacher training, continuing professional development and school-level guidance have lagged behind. This support gap may partly explain the relatively slow progress in adapting teaching practices.
- **The clarity and language of learning outcomes also affect their uptake**. In some contexts, vague or overly technical formulations limit their usefulness for lesson planning and collaboration with employers. This has prompted schools to develop more specific interpretations at the institutional level to guide delivery.

Learning outcome in work-based learning

- In countries with **well-established work-based learning systems, learning-outcomes-based curricula shape training content, assessments, and employer-VET collaboration, aligning educational objectives with labour market needs**.
- However, well-developed national policy frameworks do not always translate into using learning outcomes in companies, and the **learning-outcome-based approach is applied inconsistently across companies and countries**. In this context, **employer engagement** plays a role in defining the level of integration of learning outcomes in work-based practices.
- Across all studied countries, the lack of systematic, continuous professional development opportunities for trainers constrains their ability to implement learning-outcomes-based approaches in training fully.
- When trainers use learning outcomes to **guide structured on-the-job training, they often do so in an intuitive manner**. However, trainers primarily rely on their industry expertise rather than actively engaging with learning outcomes in training activities.
- In **more mature work-based learning systems, apprentices are highly aware of required competencies, often receiving personalised feedback**. In less mature systems, apprentices tend to focus more on immediate tasks rather than broader learning outcomes.

Learning outcome in assessment practices

- Learning outcomes **form a core component of national assessment regulations in all countries covered by the study**. Assessment criteria are also defined at the national level in most cases, though differences remain in terms of scope, detail and implementation.
- Assessment criteria describe intended learning outcomes and play a key role in shaping learner evaluation. Their influence depends on how clearly they are formulated and consistently applied. Most countries ensure alignment between assessment criteria and intended learning outcomes through national regulations and quality assurance mechanisms. These criteria act as a bridge between intended and achieved learning outcomes.
- Formative assessment is generally less regulated than summative assessment. **Teachers often rely on intended learning outcomes to guide formative assessments, whereas detailed criteria are more commonly used for summative purposes. Key areas for improvement include strengthening the use of formative assessment, promoting learner self-assessment and peer assessment.** Student perceptions of assessment are shaped by their motivation, learning attitudes and the broader educational culture.
- Teachers and trainers generally value learning outcomes for enhancing transparency in expectations. From their perspective, **alignment between learning outcomes and assessment** criteria supports lesson planning and the design of assessment procedures, including task formulation. At the same time, educators often interpret broader learning outcomes flexibly to accommodate unplanned learning. However, **when learning outcomes are too vaguely defined, teachers must invest time and effort to operationalise them, complicating the transformation of achieved learning into assessable outcomes.**
- **Students often struggle to relate assessment criteria to broader competences.** While some are more familiar with assessment criteria than intended learning outcomes, teachers play a crucial role in bridging this gap. By translating the criteria into accessible language and concepts, educators help clarify expectations and better prepare students for examinations.
- **Learner awareness and ownership of learning processes can be enhanced when information about intended learning outcomes, assessment procedures and results is shared in individually developed written documents.** These documents can be co-developed with learners or at least made available to them.
- Assessments are often conducted in the same environment where learning occurs, but this is not always feasible. Some countries have made efforts to align assessments with workplace demands, requiring learners to demonstrate skills through practical tasks. VET institutions use labs and workshops to simulate professional settings, which learners prefer as they reflect real-world conditions. However, the quality of work-based assessments varies and depends largely on individual trainers.
- **Variations exist in how transversal skills and competences are addressed in VET systems.** In some countries, they lack formal assessment criteria and are assessed implicitly through group work and presentations. In others, they are integrated into broader assessment frameworks or evaluated with tools used during work-based learning. While some learners appreciate informal recognition of these skills, many are unaware of transversal competences and struggle to identify and assess them

Key literature:

Cedefop (2010). *Learning outcomes approaches in VET curricula: A comparative analysis of nine European countries*.

Cedefop (2022). *Defining, writing and applying learning outcomes: a European handbook: second edition*

Cedefop. (2024). The influence of learning outcomes on pedagogical theory and tools. Publications Office of the European Union. Cedefop research paper. <http://data.europa.eu/doi/10.2801/518367>