



CEDEFOP

European Centre for the Development
of Vocational Training

Advancing research on adult learning

Using and innovating quantitative approaches to support
effective policies

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ABSTRACTS

Beyond Certification Counts: Rethinking the Measurement of Operational Competence in Adult Learning Systems

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A theoretical consideration on measurements of adult learning

From the accepted abstract

“European adult learning and vocational education systems are increasingly expected to support labour market adaptability, productivity growth and economic competitiveness under conditions of digital transformation, demographic change and evolving workforce demands.

At the same time, employers across multiple sectors continue to report persistent skills gaps and insufficient workplace readiness despite rising participation rates, qualification attainment and certification outputs.

This raises an important measurement question: **do current adult learning indicators sufficiently capture operational competence under real workplace conditions?”**

Do we already know enough to answer this?

Adult learning takes place across very different fields of work.

Agriculture. Manufacturing. Healthcare. Aerospace.

...

We track participation, qualifications and certification, and assess proficiency.



But across all these fields of work,

what education and training develop ultimately meets the world of work

— a changing and partly unpredictable operational reality.

We will use **Knowledge** as one test case for the measurement question.

<https://esco.ec.europa.eu/en/about-esco/escopedia/escopedia/knowledge>

The EQF describes knowledge through progressively more complex level descriptors across levels 1–8.

L1: basic general knowledge → ... → L8: knowledge at the most advanced frontier <https://europass.europa.eu/en/description-eight-efl-levels>

Different fields of work. Different EQF levels. Different knowledge.

Consider knowledge in agriculture.

Assume that the knowledge indicated by the qualification or assessment is there.

Let us take attestation as the analytical reference point.

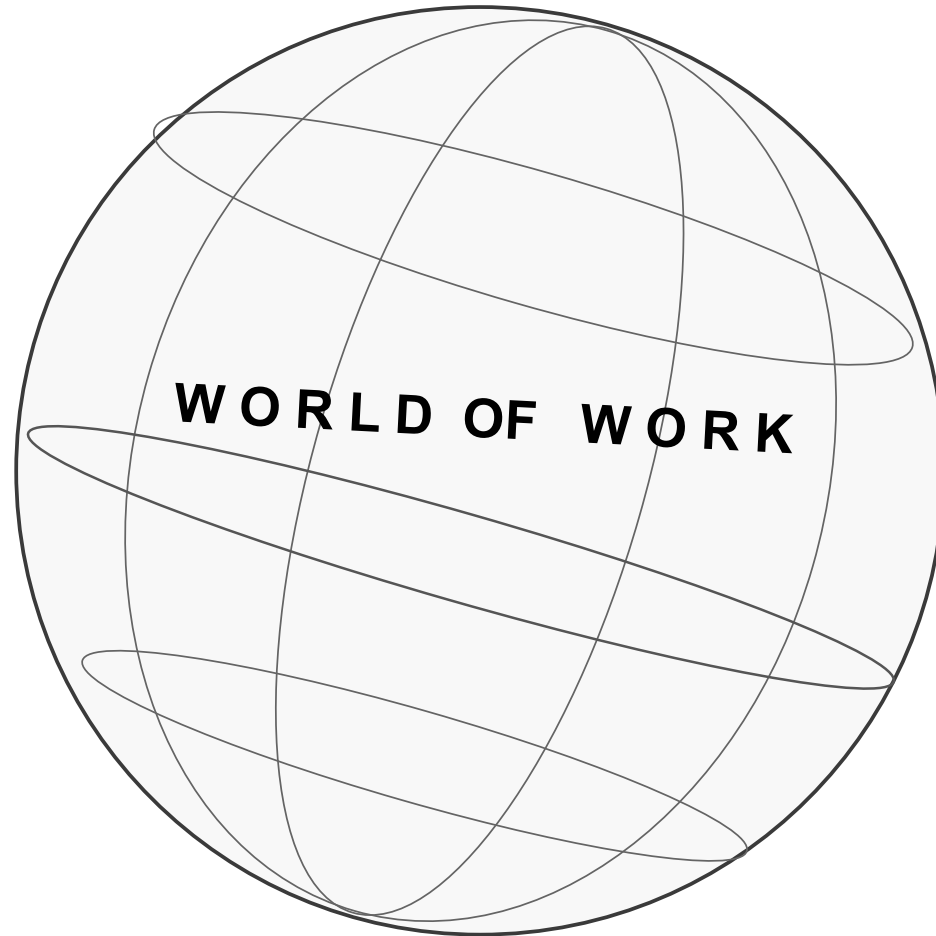
**From there, operational reality allows us to examine
how far claims based on that attestation hold under real conditions.**

In plain language:

Can we, on this basis, entrust the person with real work?

What would we actually have to observe before answering yes?

We would have to observe whether and how **Knowledge** remains functionally effective **under operational conditions.**



Where a claim extends to operational competence,

→ **Knowledge should not be interpreted independently of the conditions under which it has to remain effective.**

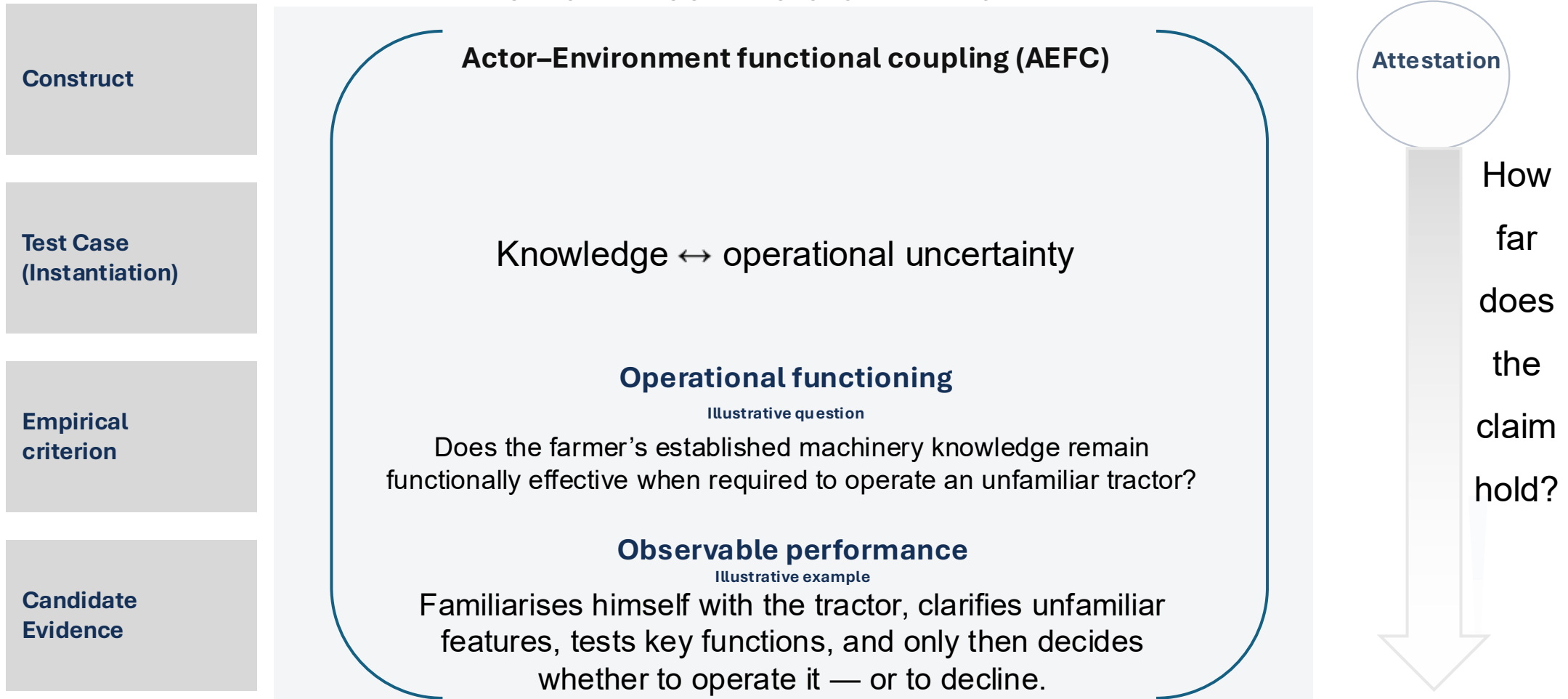
AES, PIAAC and Cedefop's ESJS and ETLs provide important evidence for their respective measurement purposes.

If knowledge is to remain functionally effective under operational conditions, a measurement question arises:

**How might this functional relation
between the person and the World of Work
be specified and examined?**

I propose Actor–Environment functional coupling (AEFC) as the functional relation between actor and environment under operational conditions.

UNIT OF ANALYSIS: THE FUNCTIONAL RELATION



Can we entrust the person with real work?

Why does this matter?

Policy and reform rely on what attestation is taken to represent in real work.

The measurement question is the inferential reach of that claim
under operational conditions.

Examining Actor–Environment functional coupling may help clarify this reach.

Future research could test task autonomy, supervision dependency and adaptation as
candidate indicators of operational functioning across situations and over time.

Can we entrust the person with real work?