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TRAINING

# DEFINING LEARNING OUTCOMES - SWISS EXPERIENCES

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13<sup>th</sup> October 2016 – 2<sup>nd</sup> PLF on learning outcomes,  
CEDEFOP, Thessaloniki

# Overview

1. The swiss VET-system
2. **Challenges** of defining and writing learning outcomes
3. **Theoretical background:** situation based approach
4. **Application:** defining and describing competences (learning outcomes)

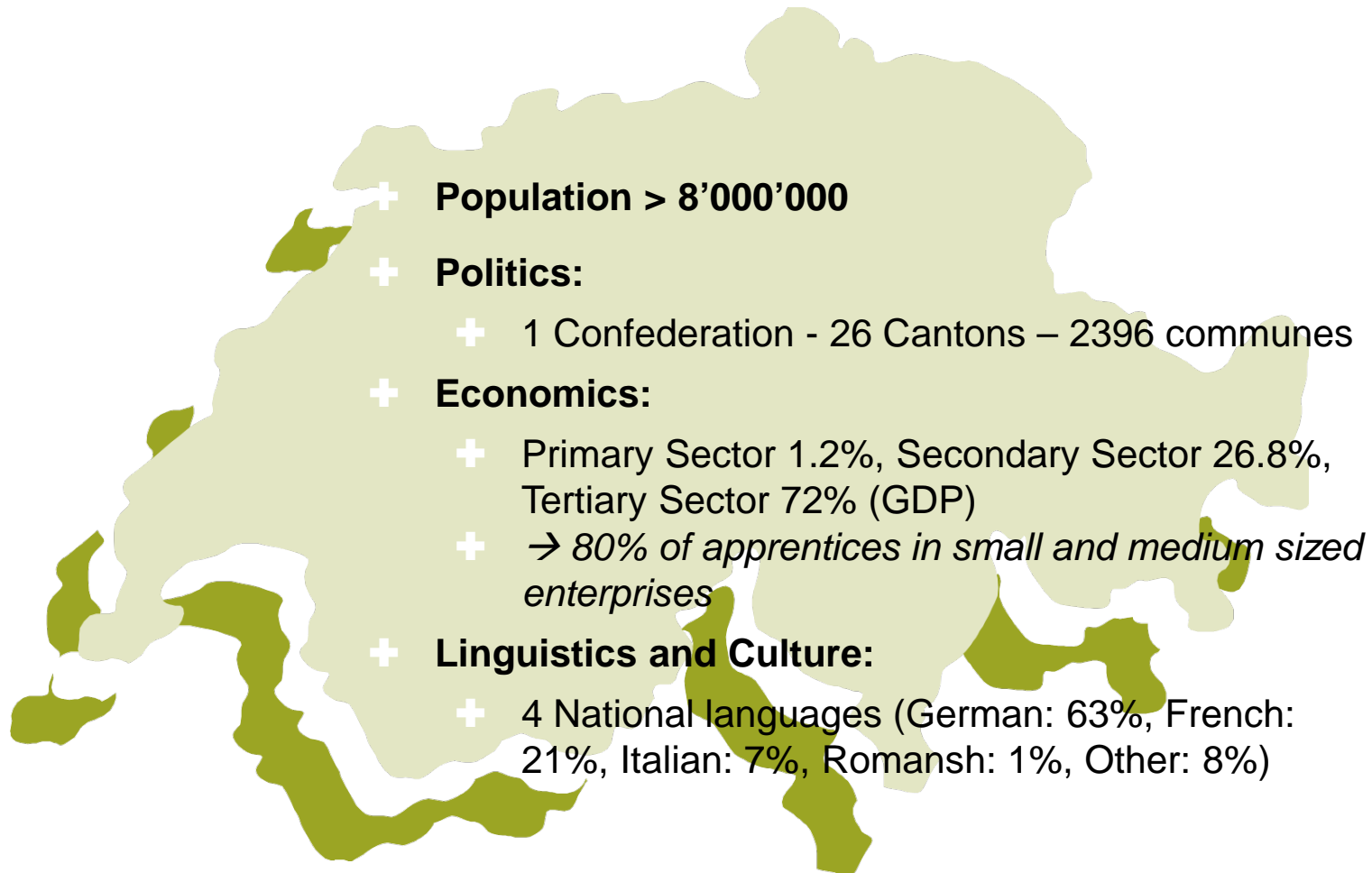


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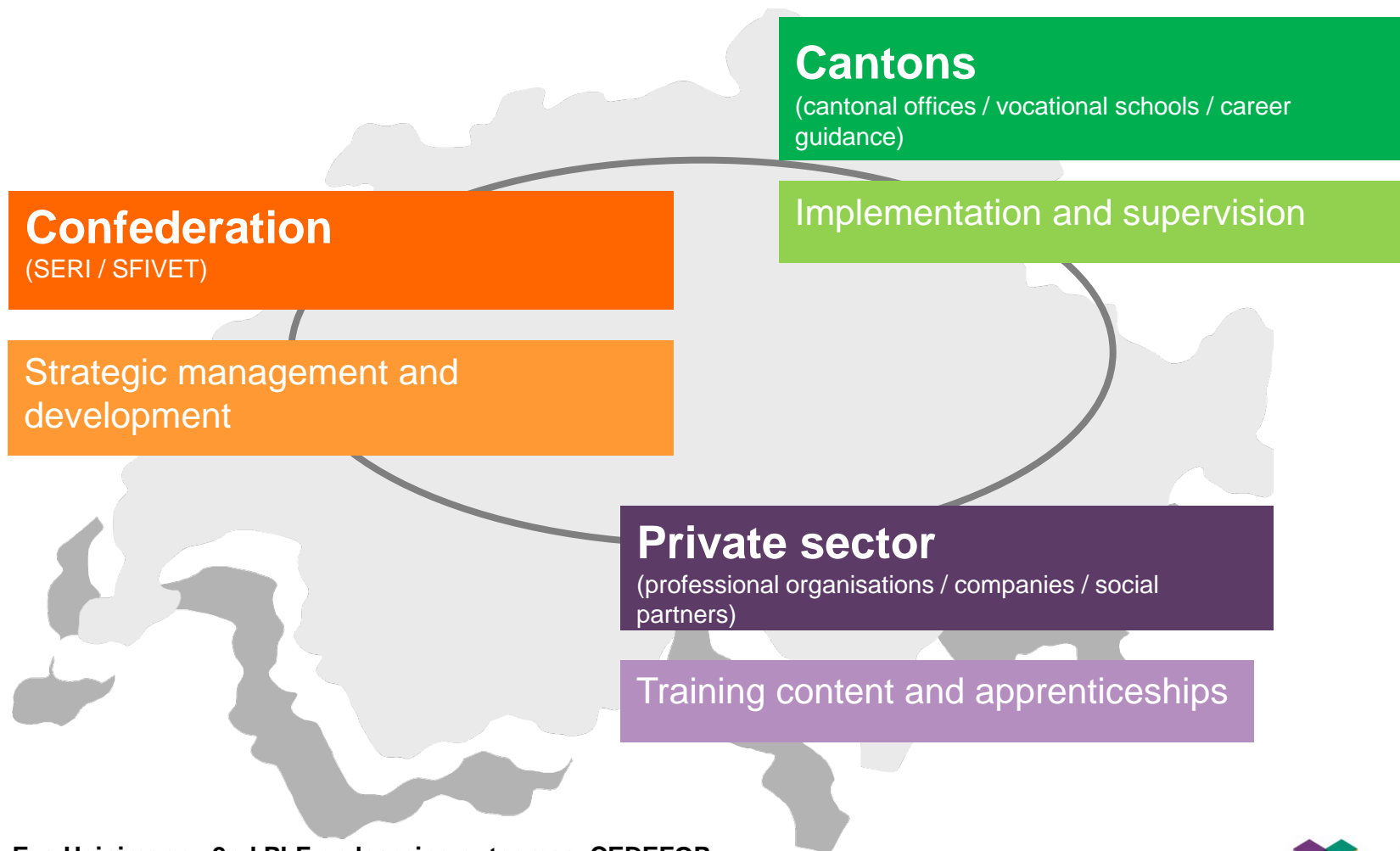
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# THE SWISS VET-SYSTEM

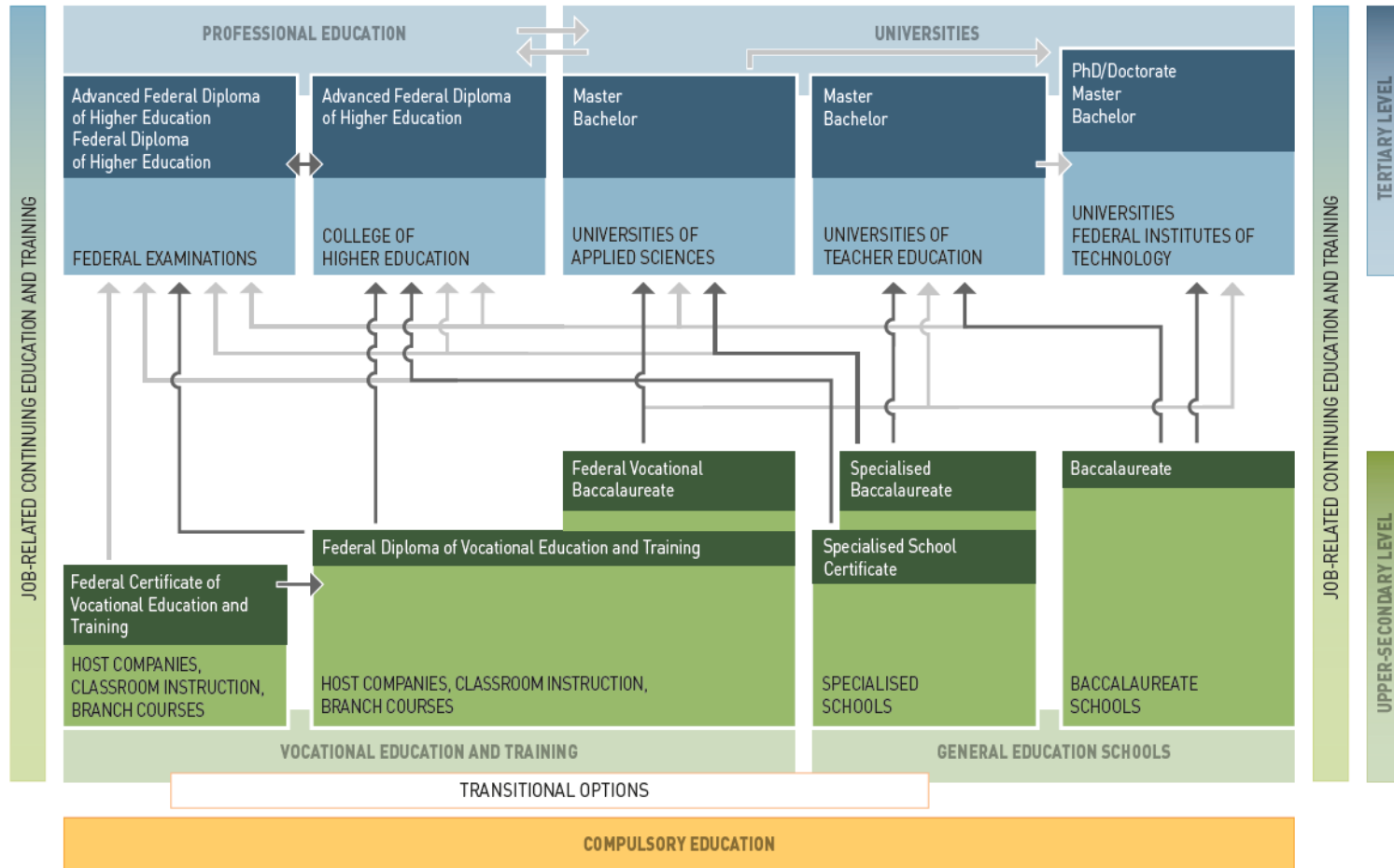
# Switzerland at a glance



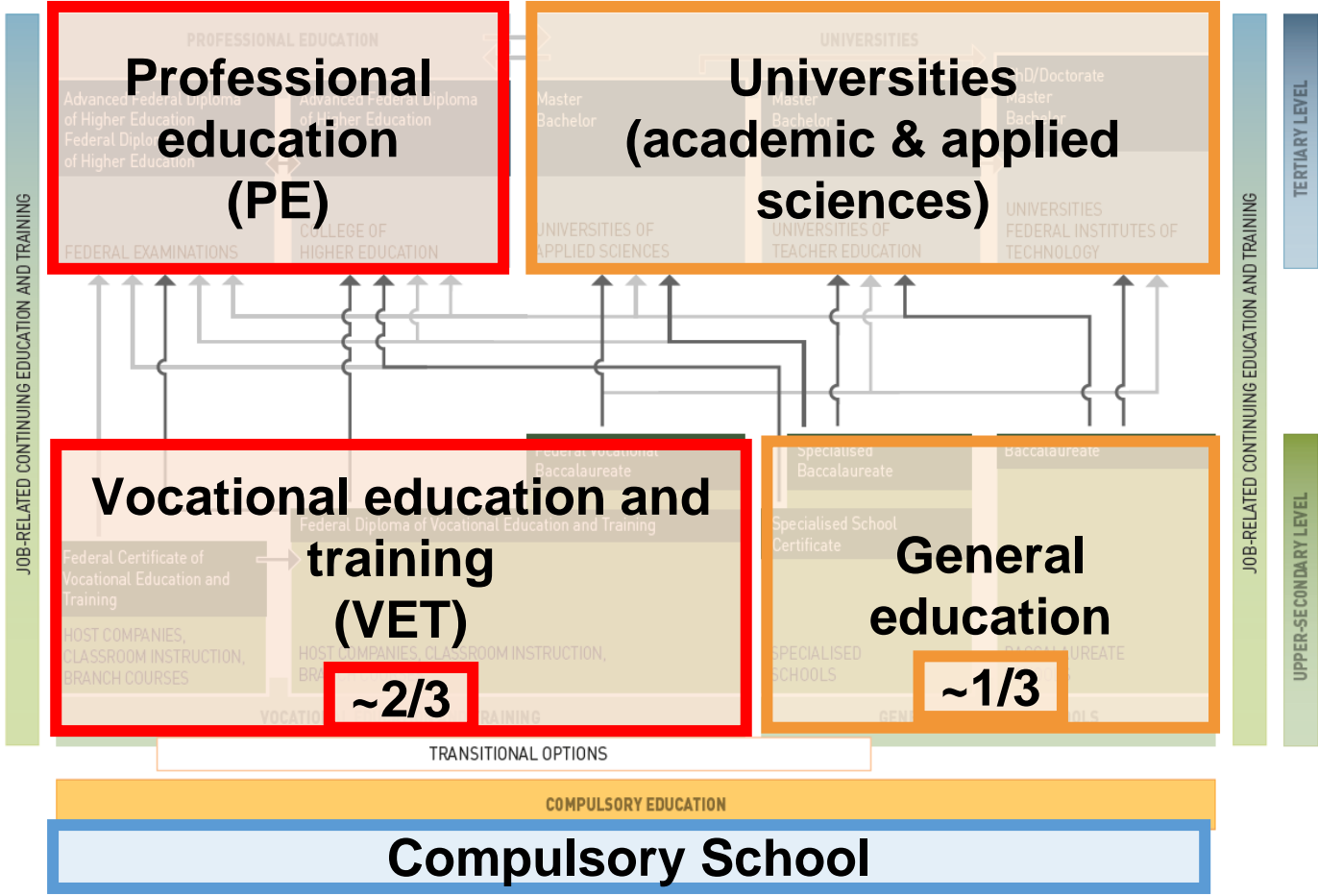
# One mission – three partners



# Swiss education system



# Swiss education system



# Swiss dual-track approach to VET



## Practice

In-company training  
(3-4 days per week)

Inter-company courses



## Theory

Classroom instructions at  
VET-school  
(1-2 days per week)

Preparatory course for FVB



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## **2. CHALLENGES OF DEFINING AND WRITING LEARNING OUTCOMES**

# Gap between theory and practice as a main challenge



# Some observations...

- Learners often **acquire skills “blindly”**, without knowing what purpose they serve (e.g. calculation procedures).
- Information saved in the form of **facts cannot be spontaneously activated** and used to solve problems.  
Such **knowledge** cannot be perceived or used as a tool. It is **inert**, i.e. limited to a specific learning context and cannot be transferred flexibly to other contexts even if it is available and relevant.

- **Classroom instruction** is perceived by learners as an aim in itself rather than a means of achieving objectives (too little experience with practical applications).
- **The level of theoretical knowledge** defined in curricula or training plans / school syllabus is often too high in relation to needs in practice.

# That's why...

→ learning outcomes (competences) instead of knowledge and «school subjects» have to be defined and described concretely.

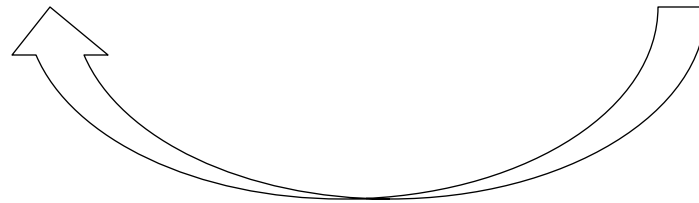
→ Coordination and Collaboration between learning locations have to be improved.



**Practice**



**Theory**



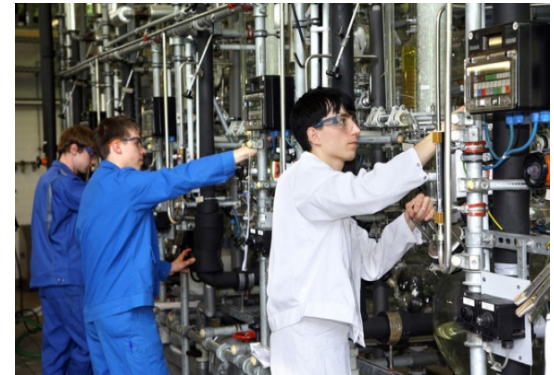


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# 3. THEORETICAL BACKGROUND: SITUATION BASED APPROACH

# Focus on concrete professional activities (work situations)



# Situation based approach

Example: planting plants (Federal VET diploma in gardening)



Title	Planting plants
Goal	Properly planting plants
Action	<ol style="list-style-type: none"><li>1. Marking surfaces</li><li>2. Digging plant holes or tilling the soil</li><li>3. Fertilising the soil and mixing in soil enhancers</li><li>4. Covering and watering plants</li><li>5. Attaching to sticks</li><li>6. Write reports on action taken</li></ol>
Product	Properly planted plants
Participants	Depends on workload
Responsibility	Gardener, site supervisor
Material	Soil enhancer, fertiliser, sticks, string
Tools	Shovel, space, pickaxe, possibly power shovel, utility vehicle
Workplace, duration	Frost-free period

# Situation based approach

Example: planting plants (Federal VET diploma in gardening)

## Knowledge

= *theoretical knowledge*  
→ *understanding*

Material, attributes,  
fields of application



## skills

= *practical know-how*  
→ *proficiency, exercise*

Use and  
maintainance of tools  
/ instruments

## Attitudes

= *social and personal competence*

Recognition of potential  
accident risks, working in a  
team

# Definition of professional competence

Professional competence is the ability to successfully handle a situation relating to one's line of work. Individuals draw upon a bundle of relevant resources to adequately deal with each situation:

- Knowledge
- Skills
- Attitudes

(see Kaiser, 2005; Le Boterf, 1998)

# Why this approach?

- Learning is much more effective, when it is based on **experienced** work situations.
- **Typical work situations** should remind learners of what they experienced.
- **Experienced work situations** become an **anchor point** for recollection and enable linking of new knowledge, skills and attitudes.

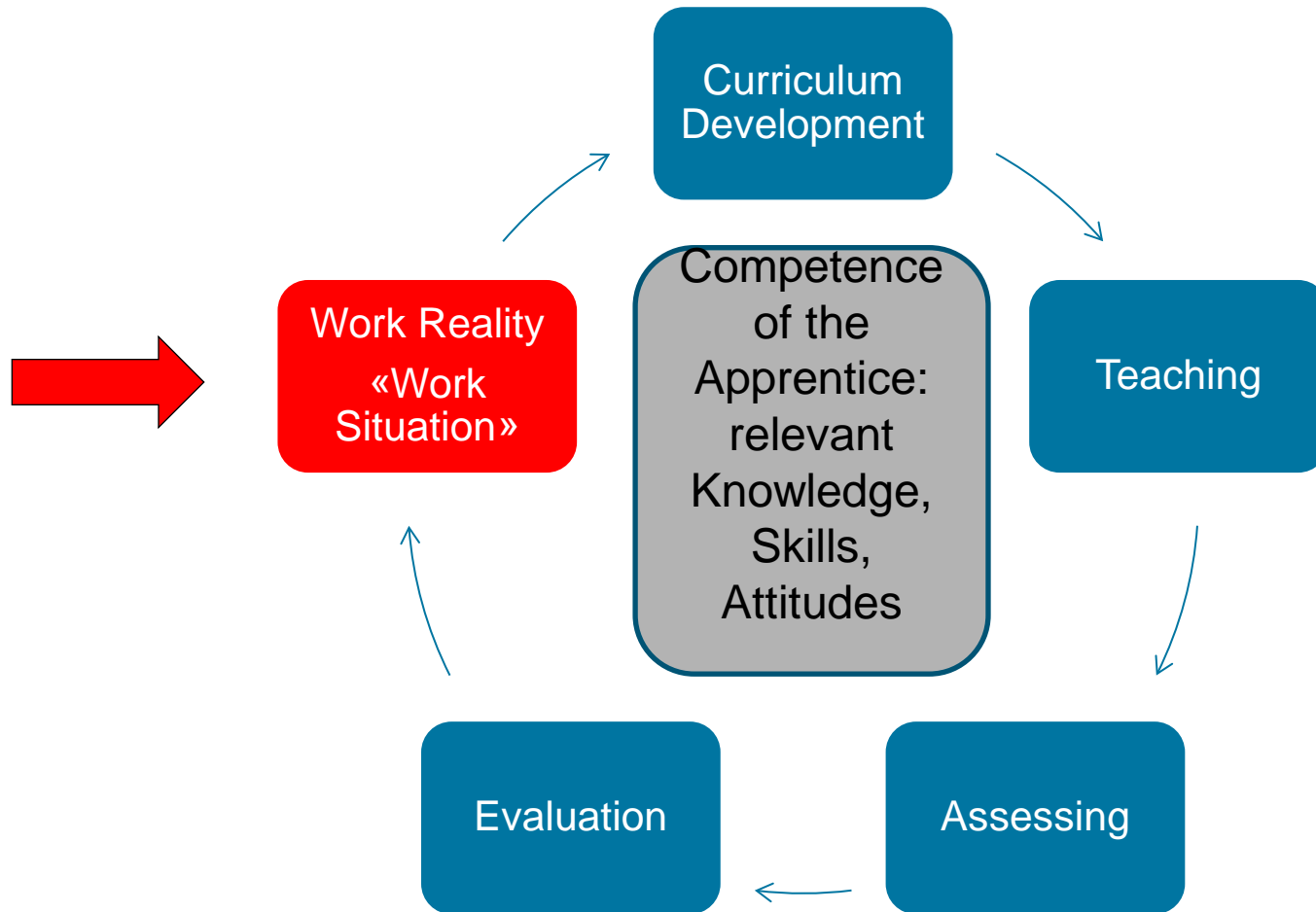


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# 4. APPLICATION: DEFINING AND DESCRIBING COMPETENCES

# SFIVETs method – situation based approach



# Activity analysis: overview

## Workshop 1

Describing activities

## Workshop 2

Categorising activities

## Workshop 3

Describing the future

## Workshop 4

Validating the profile

30-60  
competences  
(qualification  
profile)



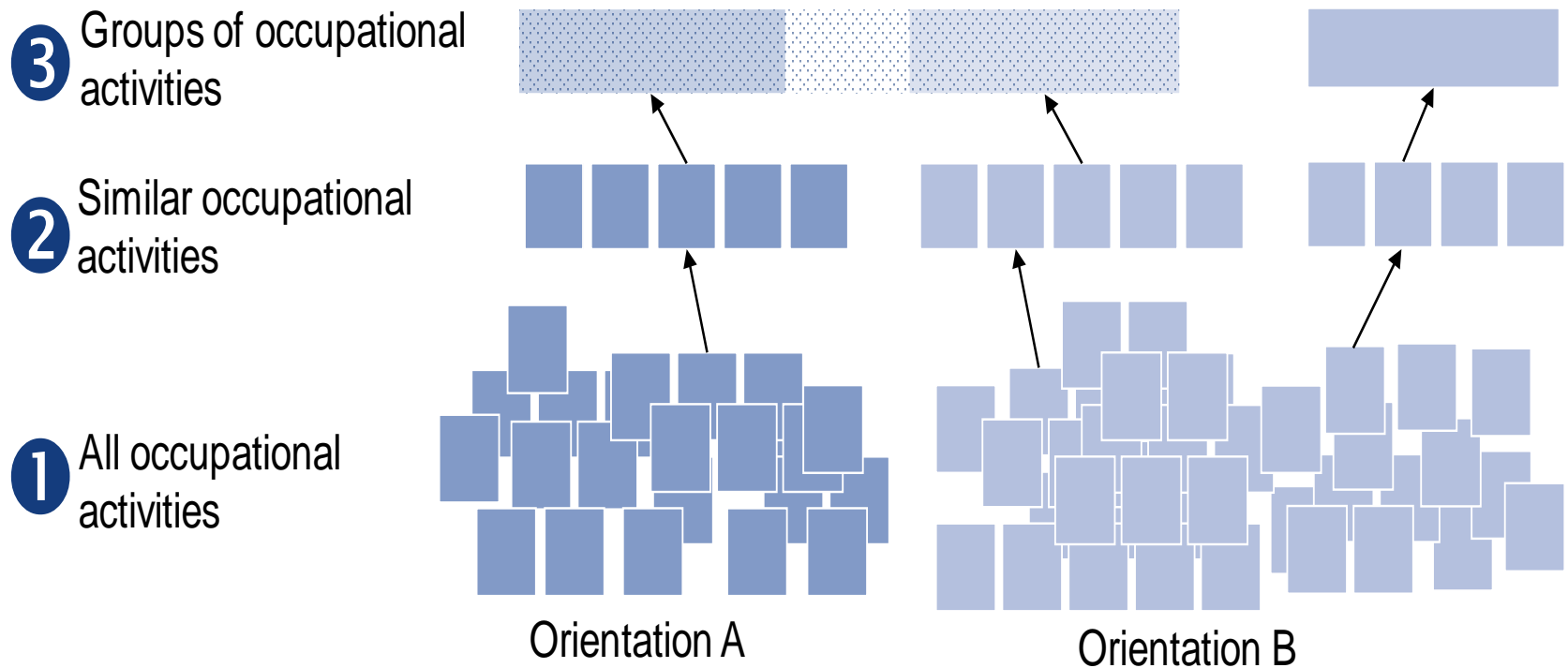
# Description of a work situation - example

Title	<b>Planting plants</b>
Goal	Properly planting plants
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# Workshop 2: Having experienced workers categorise occupational activities



# Bottom-up procedure



# Workshop 3: looking at the future: Having experts and visionaries define the development of the profession



What new competences might be relevant for the labour market in the next 10 years?

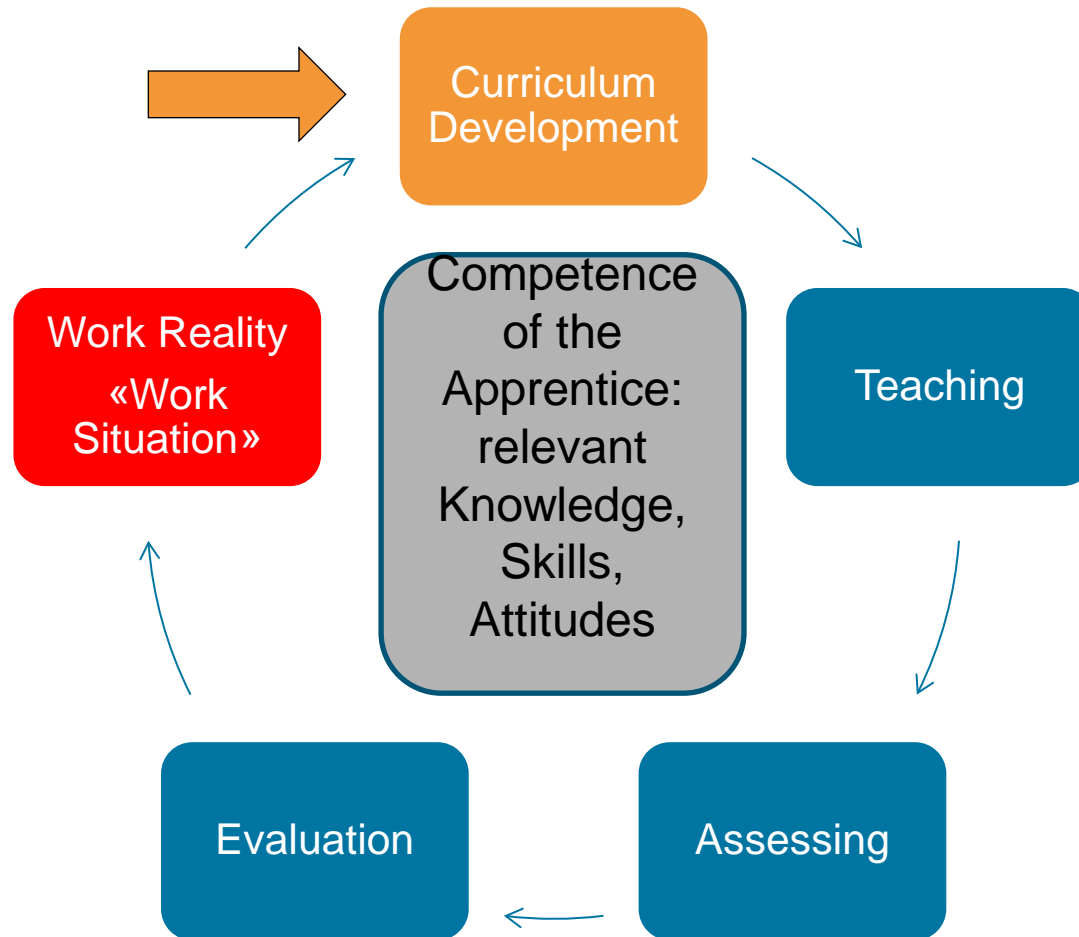
→ additional relevant activities/situations are added to the profile.

# Workshop 4: Having experts validate the qualification profile

Example competence profile Gardener (excerpt)

Area of Competence	Professional competences ( <b>situations</b> )			
	1	2	3	4
<b>Consultation and sales</b>	Advise customers	Take orders	Sell products and services	Write reports and delivery receipts
<b>Delivery and service</b>	Deliver products	Perform services		
<b>Operational maintenance</b>	Supervise production facilities and equipment	Carry out maintenance work	Dispose of material in an environmentally sound fashion	
<b>Planting and seeding</b>	Rework plant and crop surfaces	Plant plants	Create grasslands and meadows	Prepare pots for planting

# SFIVETs method – situation based approach



# Development of the Training Plan: Writing learning objectives for the three learning locations based on situation descriptions

skills;  
attitudes

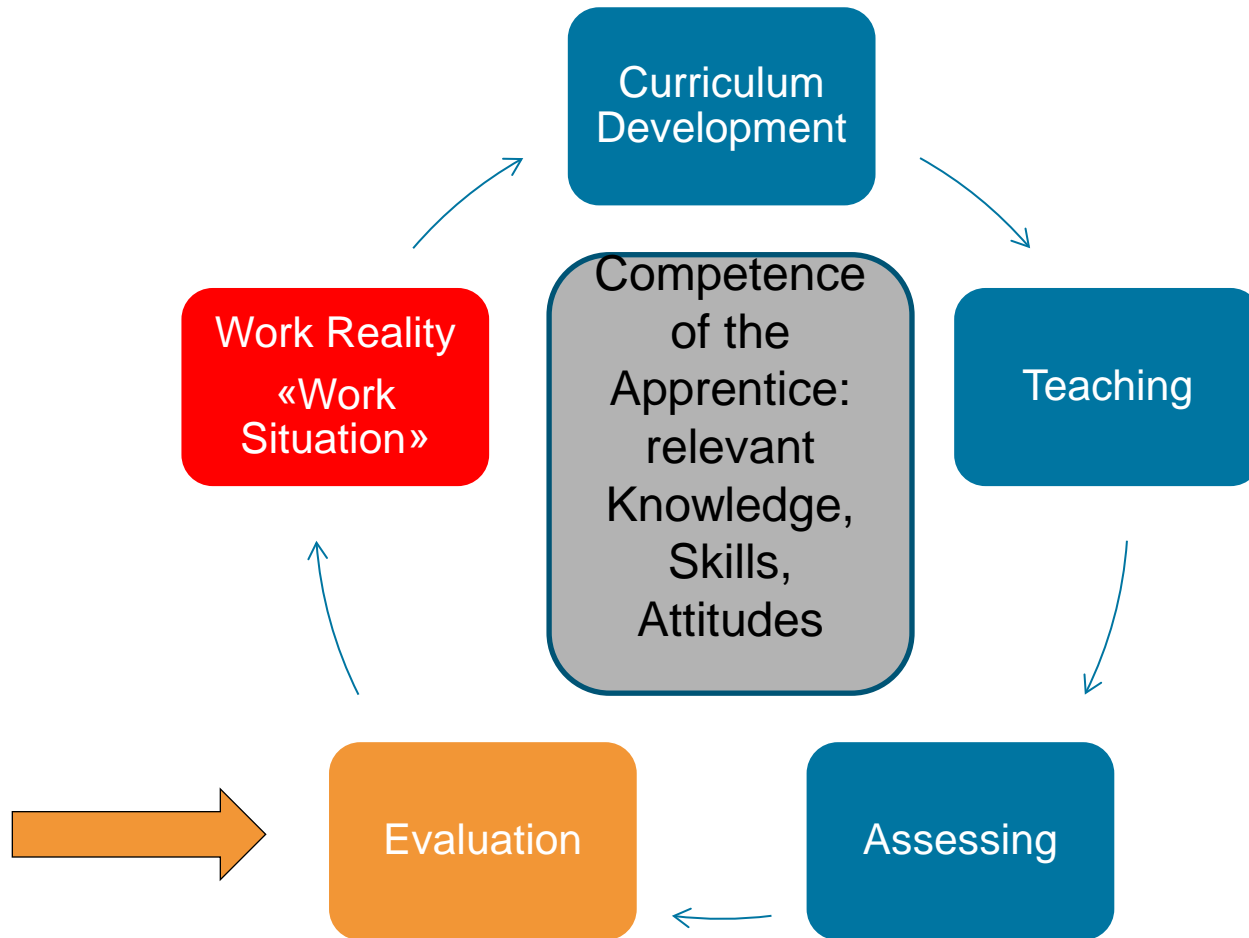
**Planting plants (*concrete description of a typical work situation*)**

knowledge

company	intercompany courses	VET School
Learners plant plants properly in accordance with situation at hand Learners support their team-members	Learners apply different planting techniques	Learners describe various planting methods used for different applications and plant properties



# SFIVETs method – the holistic situation based approach





**Thank you very much for your attention**

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