



**CEDEFOP**

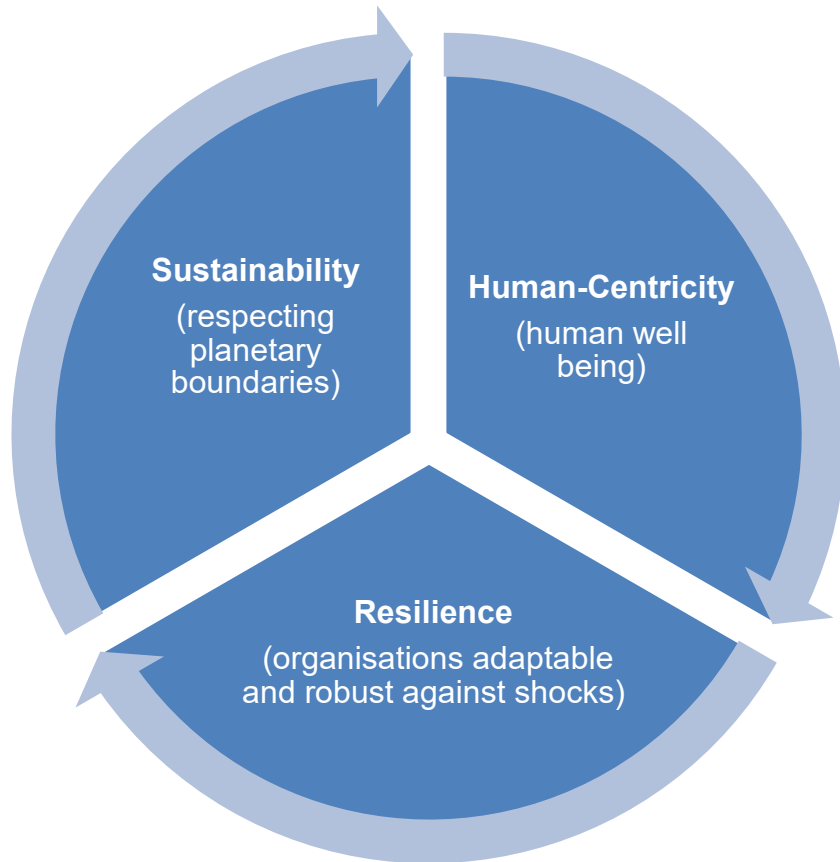
European Centre for the Development  
of Vocational Training



# Learning in enterprises

Messages from the European Training and Learning Survey

# Industry 5.0

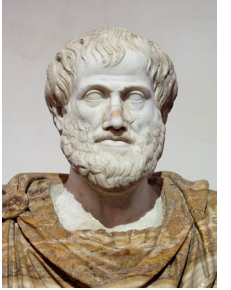


## Human-centricity in the workplace

- Technology enhancing workers' capabilities
- Ability to handle more complex tasks
- Firms can design jobs to include complex tasks
- Using human capital as an organisational resource to obtain competitive advantage (create value through people)
- Workers' empowerment and decision-making

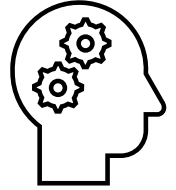


# Complexity, empowerment and learning



- The reality of work today: complexity and the need for resilience
  - VUCA (volatile, uncertain, complex, ambiguous) environments
  - Technological and other shocks: new situations, uncertainty, unclarity about the right course of action, prevents the development routines
  - Stakeholder: task interdependencies and diverging interests between stakeholders (worker, team, department, organisation, consumers, and suppliers)
  - Difficult tasks relying on tacit and explicit knowledge
- Skills expressed as practical wisdom, incorporating
  - **Expertise**: pattern recognition, selective attention to salient features
  - **Phronesis**: the ability to do the right thing (moral dimension, interest of stakeholders)
  - **Praxis**: the ability to do things right (implementing practice from theory)
- In complex environments gaps emerge between what one ought to know (or do) and what one knows and can do (has the skills to do) tend to emerge

# Learning and skills development



- Learning
  - Skills *acquisition*: learning specific skills and/or knowledge (transfer of training)
  - Skills *development*: development of practical wisdom
- Skills development as outcomes of **explicit** (conscious and intentional) and **implicit** (unconscious and automatic) learning processes
- Practical wisdom: relationship between new and existing knowledge
  - can be assimilated in an existing understanding of one's job
  - may challenge the current understanding of one's job and may need to be accommodated via new understanding of what doing one's job well entails (transformative learning)
- Skills development is a non-linear process: it depends on when and how the new information and skills interact with the existing body of knowledge and skills

# Cedefop's European Training and Learning Survey (ETLS)

- Aims to open the black box of learning in the workplace and to understand which individual and contextual factors play a role in skills development
- Distinction between learning (for work, skills development) and the process of learning (participation in learning activities)
- The process of learning:
  - Focus on frequency of participation in learning activities (extensive margin)
  - Distinction between:
    - Mandatory and behavioural learning (induction, health and safety, anti-harassment)
    - Employer organised learning activities (on-the-job and off-the-job training)
    - Workers' self-initiated learning activities.
- Pays attention to the effects of organisational context on skills development and on participation in learning activities



- Carried out in all EU Member States plus Norway and Iceland
- Fielded between October 2023 and February 2024
- Combination of CATI and CAWI
- Additional questions in CAWI interviews
- Weights applied: Age and gender, education, occupation, sector, region

# Understanding skills development

|    | In the last 12 months/Since you started your main job, to what extent have you become better, if at all, at any of the following aspects of your work? |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | <b>At understanding how my work can be done better</b>                                                                                                 |
| 2  | <b>At solving problems at work</b>                                                                                                                     |
| 3  | <b>At doing my job tasks with less supervision</b>                                                                                                     |
| 4  | At understanding the tasks I need to do                                                                                                                |
| 5  | At knowing whether I am doing a good job                                                                                                               |
| 6  | At describing how I do my work to colleagues                                                                                                           |
| 7  | At avoiding mistakes at work                                                                                                                           |
| 8  | At making better decisions at work                                                                                                                     |
| 9  | At performing different job tasks                                                                                                                      |
| 10 | At doing my job tasks faster                                                                                                                           |
| 11 | At doing my job in a way that does not harm the environment, i.e., by reusing materials, reducing waste or energy.                                     |

# Employer organised learning activities (learning for work)

1. Participation in the last 12 months in
  - Induction training
  - Health and safety training
  - Workplace behaviour training (inclusion, anti harassment)
2. Participation in any other work-related training (in person and online, inside or outside the workplace)?
3. If YES, frequency of participation in training via two delivery modes
  - Off-the-job: while not doing my everyday job tasks (classroom or training facility)
  - On-the-job: while doing my everyday job tasks



# Participation in self-initiated learning activities

- Focus on frequency of activities in the last 12 months
  - Aimed at work-related learning (for your work)
  - Not organised by the employer
  - On worker's initiative
- Learning activities foreseen:
  - Use books, manuals, audio or video materials, including online
  - Learning through work
  - Try out different ways of doing my work
  - Think of ways I could do my work better
  - Seek advice from more experienced colleagues
  - Seek advice from managers or supervisors
  - Watch or listen to colleagues as they do their jobs
  - Training (in person or online)





## Skills development (OLS-regression)



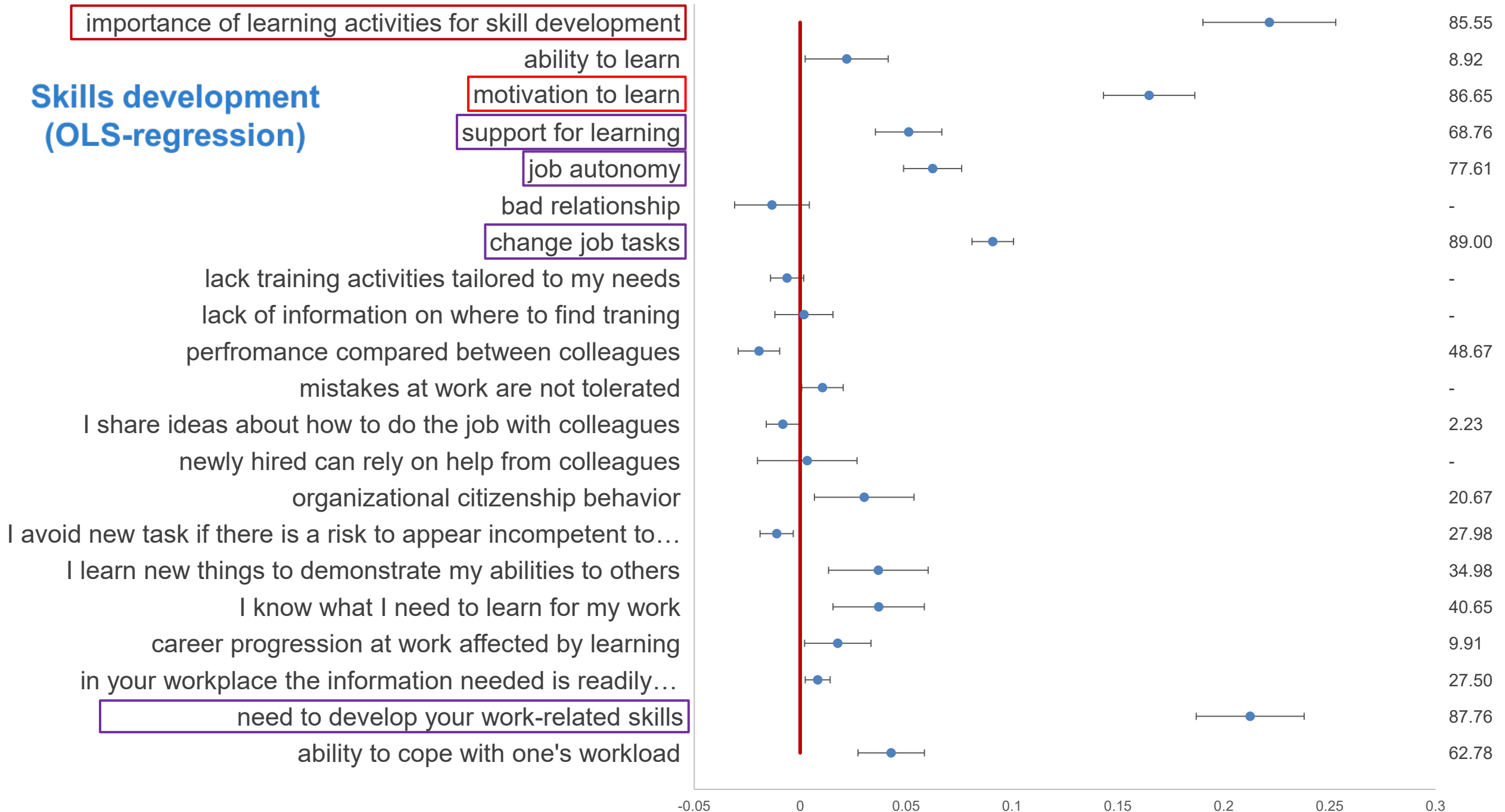
# The individual and the context

- Motivation: internal and external regulation
  - Autonomous: intrinsic (personal interest), integrated (when values of activity overlaps with personal values)
  - Controlled: external (incentives), identification (with values of activity), introjected (guilt for not meeting expectations and social norms)
- Skills gaps:
  - Personal: underskilling
  - Induced (change in job tasks), contextual
- Support: supervisors and colleagues (work context) and family and friends (external context).
- Autonomy: contextual, job design decisions
  - Influence on decisions
  - Work independently
  - Unexpected situations
  - Variety of tasks

# Skills development and learning activities

- Higher frequency of participation in learning activities shows no significant association with skills development
- Skills development is a non-linear process, difficult to predict when the input (new knowledge) contributes to the output (skills development)
- But: **no skills development** without participation in learning activities
- Skills development is positively associated with the breadth of learning activities that contribute to one's learning

## Skills development (OLS-regression)



# Key take-aways - skills development reacts to context

- **Underskilling** is a driver of learning
- Frequency of participation in learning activity is only distally related to skills development but the **breadth of activities one learns from** is proximally related to skills development
- **Learning culture** plays a crucial role
  - job design (autonomy, change in job tasks)
  - Support for learning
- **Learning motivation:** regulation of motivation and goal orientation
  - Sustain interest: autonomous and controlled by the contextual features
  - Motives: performance avoidance (-), performance approach (+)
  - Contextual focus on performance (-)

# Thank you

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# ETLS: learning process and other salient features

- Subset of the general population: employed adults (16-64 years of age)
- Carried out in 27 EU member states, Iceland, and Norway
- Modes (online samples could accommodate additional questions)
  - Telephone Random Probability Sample
  - Online Probability Sample
  - Non-probability Sample to increase sample size
- About 44.000 observations in all



# Job complexity

- Task difficulty, amount of knowledge and skills
- High autonomy and decision-making
- Technology and changing technologies
- Interdependencies between
  - Tasks within jobs, choices regarding task A affects performance in task B
  - Jobs and people: the way job A is executed impacts the amount of work to be done by workers in jobs downstream (workslop)
- Number of stakeholders affected by decisions:
  - Colleagues: the worker, the team, the unit, the department, the establishment
  - Clients
  - Suppliers