

Setting the future scene:

Expected changed to education and training in 2025

Foresight Policy Workshop

"New Ways to Learn New Skills for Future Jobs": Implications for education, training and skilling policies

JRC IPTS – DG EAC, 27 May

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Institute for Prospective Technological Studies

The European Commission's Research-Based Policy Support Organization





Education and Training (learning) are going to change (or have to change...) in the next 10-15 years

What are the expected changes?

Views from (1) experts and from (2) teachers on major changes in Education and Training in the next 10-15 years



Views from (1) experts



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Personalised, flexible, interactive learning

Learner in control Stronger focus on job-related learning

Formal education goes informal

LLL: learning shifts to home, work, community

Changing pedagogy: people learn differently

Increased use of facilitators (tools and services)

Recognise what people do and can

Globalisation of education

Institutions become enablers and connectors

Teacher becomes also mentor, coach

Open education and resources

Use of technology for learning

One important change of Education in 20 years will be...

- Group Concept Mapping
- 13 Educational experts generated 203 unique statements
- Idea generation, clustering, ranking
- Individual via email
- Clustering and rating of statements

TNO-NL, Open University NL and Attic Media-UK



Ranking on importance and feasibility



Use of technology for learning

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Expert ratings on Importance			Feasibility
Personalised, flexible, interactive			
learning	4.06 3	3.91	Open education and resources
Learner in control Stronger focus on job-related learning			Use of facilitators (tools and services)
Formal education goes informal			Use of technology for learning
LL: learning shifts to home, work, community			Recognise what people do and can
Changing pedagogy: people learn differently			LLL: learning shifts to home, work, community
Use of facilitators (tools and services)			Personalised, flexible, interactive learning
Recognise what people do and can			Teacher becomes also mentor, coach
Globalisation of education			Institutions become enablers and connectors
Institutions become enablers and connectors			Changing pedagogy: people learn differently
institutions become enablers and connectors			Globalisation of education
Teacher becomes also mentor, coach			Learner in control
Open education and resources			Stronger focus on job-related learning
	3.21 3	.15	Formal education goes informal



High priority areas but more difficult to realise



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Expert ratings on....

Importance

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Confirmation of LLL as a key priority



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Expert ratings on....

Importance

Individual & social nature of learning

Learner in control Stronger focus on job-related learning Formal education goes informa

LLL: learning shifts to home, work, community

Changing pedagogy: people learn differently

Use of facilitators (tools and services)

Recognise what people do and can

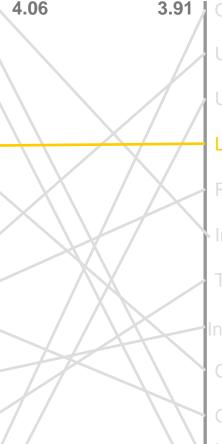
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3.15

Feasibility

Open education and resources

Use of facilitators (tools and services)

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Individual and social nature of learning

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ICT: feasible priority



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Expert ratings on....

Importance

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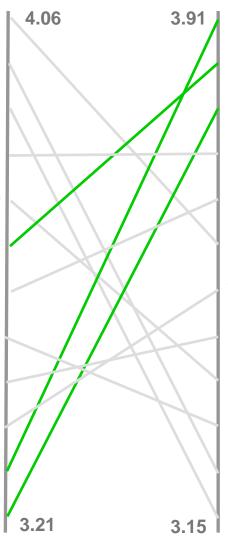
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Summary experts view

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- Major areas of change
- Changes in learning & teaching are most important but less feasible
- Shifting responsibilities from institutions to individuals
- Technology-oriented changes are most feasible
- Central place of "Lifelong Learning" as a connector and bridge to others



Views from (2) eTwinning Teachers



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eTwinning Conference 2010: Celebrating 5 years!



This year's annual conference will take place in Seville, Spain, from 5-7 February. For those unable to attend, live online streaming will be available.

One important change of Education in 20 years will be...

- Facilitated brainstorming and Group work
- 4 working sessions, 35 teachers (predominantly)



contact with nature

engaging with local

learning is global, not national

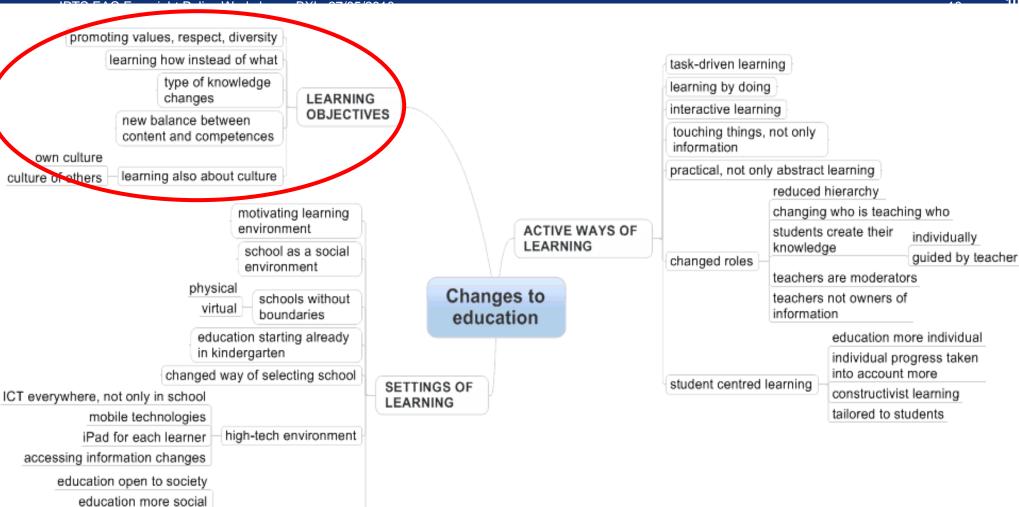
community

CONNECTIONS OF

LEARNING

Teachers on changes to education in 2025





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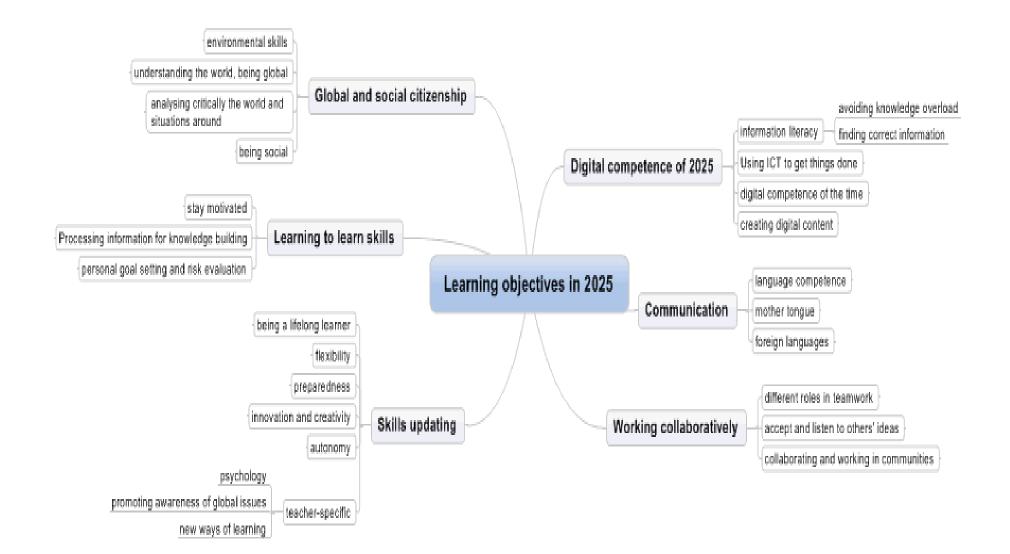
Views from Teachers on Learning in 2025



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Teachers on key competences in 2025



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communication in the **mother tongue**

communication in foreign languages

mathematical

competence and basic competences in **science** and technology

digital competence confident and critical use

learning to learn

pursue and organise one's own learning

sense of initiative & entrepreneurship

turn ideas into action; involves creativity, innovation, risktaking,...

social and civic competences

engage in active and democratic participation

cultural awareness & expression

of ideas, experiences and emotions different media

2010

Reading skills for all

Communication skills

Languages

High level of mathematics for all

Media literacy; Finding, selecting and processing information quickly; using ICT effectively; Creating digital information; Being online 24/7; Web2.0; Management of digital identities

Innovation; Creativity; Entrepreneurship

Mobile learning; Learning to learn; Selfstudying; Making investigation in internet; Learning by doing

Active participation in society; Collaboration skills; Co-operation; Conflict resolution skills; Networking

Understanding diversity; Intercultural dialogue; Cultural identity

Environment; Nature

Problem-solving; Analysing; criticizing; Keep things short and simple

Identity; Self-confidence; Self-esteem; Keep independence;

Flexibility to change; Openness to change; adapting to change; Stress management

2030

European Commission: Key Competences (2006)

Major areas of change are known

- Shift in emphasis from knowledge to competence-based learning
- Re-considering key competences for 21th century including assessment and certification
- Ensuring constantly evolving digital competences for all (also for teachers)
- Supporting learner-centred, personalised, lifelong, life-wide and informal learning

Challenge for policy makers lies in multi-dimensional nature of the "educational process":

- Different ways of learning and of teaching (pedagogical change)
- Changing roles of actors and institutions, shifting responsibilities
- Enabling role of technologies
- Changing skills needs and competences (including digital competences) in society and economy require also changing assessment and certification schemes

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Thank you

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http://is.jrc.ec.europa.eu/pages/EAP/eLearning.html