



## The Future of Learning

New Ways to Learn  
New Skills for Future Jobs

*Foresight Policy Workshop  
"New Ways to Learn New Skills for Future Jobs"  
JRC IPTS – DG EAC, 27 May*

**An assessment of learner profiles  
and individual needs  
in Europe in 2025**

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Joint Research Centre (JRC)  
Institute for Prospective Technological Studies (IPTS)



**How will schools meet future learning needs?**

**How can demand & supply of skills be matched?**

**How can people continuously update their skills?**

I'm bored. Why can't I go to uni already?

Why don't they teach you at uni what you need to find a job?

I am highly qualified – but my job has become obsolete...

Pedagogy remains important, teachers need to learn from one another

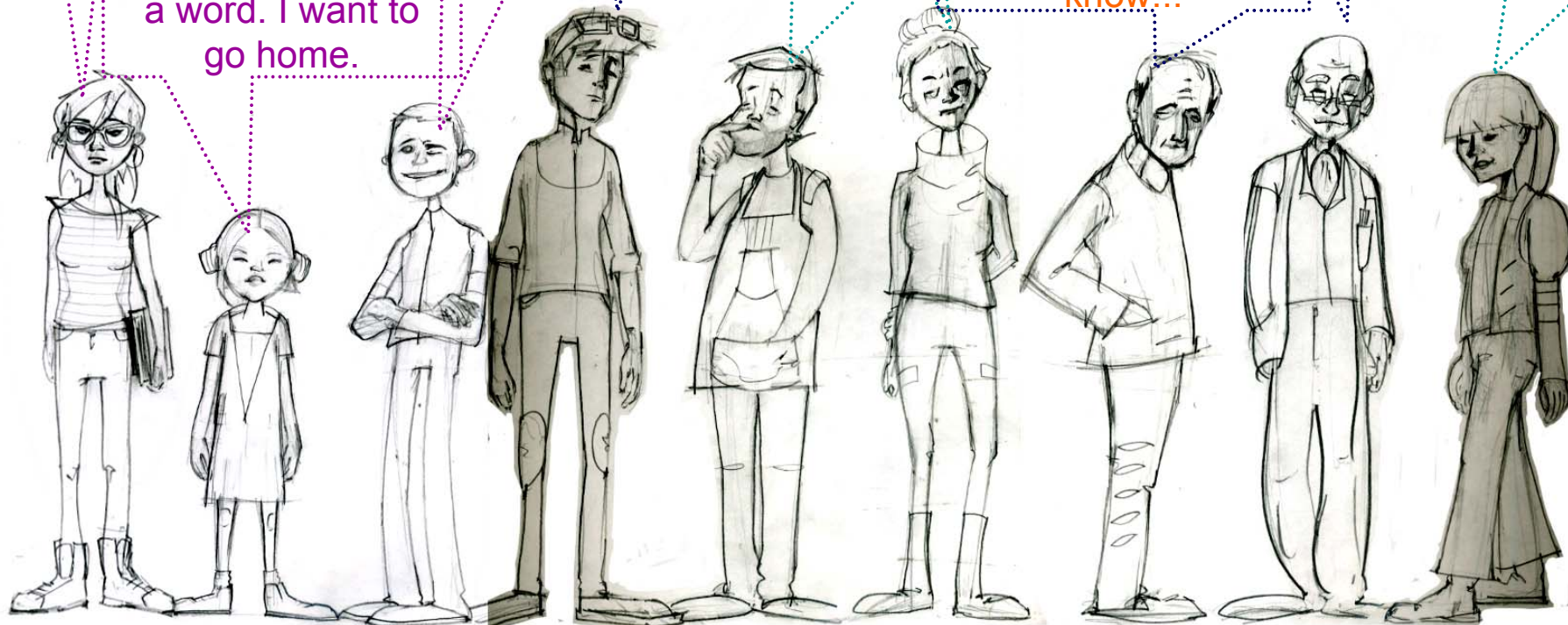
School? Forget it! I'm not going back there!

I would like to open my own business...

I need to improve my soft skills, but I don't want them to know...

How do I qualify for a new job with my poor CV?

I don't understand a word. I want to go home.



Emma  
16 years

Chanta  
8 years

Bruno  
14 years

Joshua  
23 years





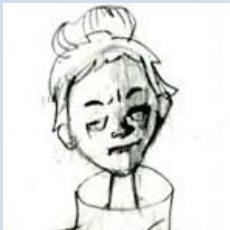




Sven  
42 years

Martina  
59 years

Slavi  
55 years

Frank  
75 years

Ingrid  
32 years

	Formal Learning	Non-Formal Learning	Informal Learning
Children & Youth	<b>Quality &amp; Efficiency</b>  <b>Emma, 16, needs new challenges</b>	<b>Early School Leaving</b>  <b>Bruno, 14, skips school</b>	<b>Social Cohesion</b>  <b>Chanta, 8, feels lost in a foreign country</b>
Qualifying for a job	<b>Workers with no/low qualifications</b>  <b>Ingrid, 32, needs to enter a new job field</b>	<b>Re-skilling</b>  <b>Martina, 59, needs to enter a new job field</b>	<b>Labour Market Re-integration</b>  <b>Sven, 42, full-time father, looking for a job</b>
Skills development	<b>Transition from Higher Education</b>  <b>Joshua, 23, relevant degrees, but lack of key skills</b>	<b>Up-skilling</b>  <b>Slavi, 55, wants to improve his management skills</b>	<b>Teacher Training</b>  <b>Frank, 75, wants to pass on his knowledge</b>



## Children & Youth

### How will schools meet future learning needs?



**Emma, 16,**  
needs new  
challenges



**Bruno, 14,**  
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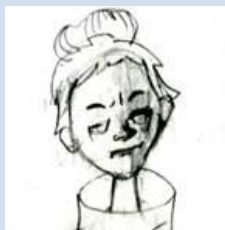
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## Qualifying for a job

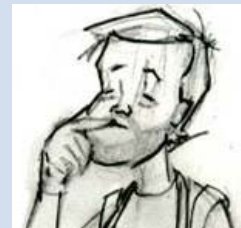
### How can demand & supply of skills be matched?



**Ingrid, 32,**  
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**Martina, 59,**  
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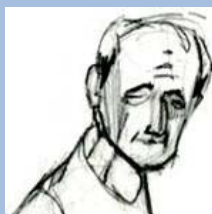
**Sven, 42,**  
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## Skills development

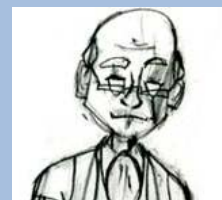
### How can people continuously update their skills?



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knowledge

<https://spreadsheets.google.com/viewform?formkey=dF9aVFZxSDMtSWd2S01LV1VQVXg2VkE6MQ>

I'm bored. Why  
can't I go to uni  
already?

## Experimentation with different formats:

→ Open discussion on web platform

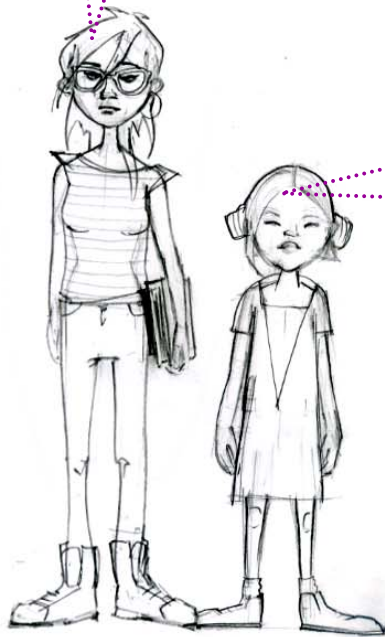
→ Short survey, 3x3 questions:

- 1) institutional change (Emma)
- 2) the role of teachers (Frank)
- 3) inclusion (Chanta)

Pedagogy remains  
important, teachers need to  
learn from one another

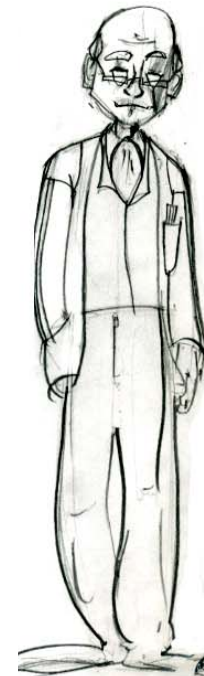
**N=45** responses

I don't understand  
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go home.



Emma  
16 years

Chanta  
8 years



Frank  
75 years

<http://www.surveymonkey.com/s/5FTV3RK>

Online survey on 3 personas  
representing 3 themes;  
6-8 questions per theme;  
**N=89** respondents

Re-skilling

Up-skilling

Labour market re-integration



Sven  
42 years

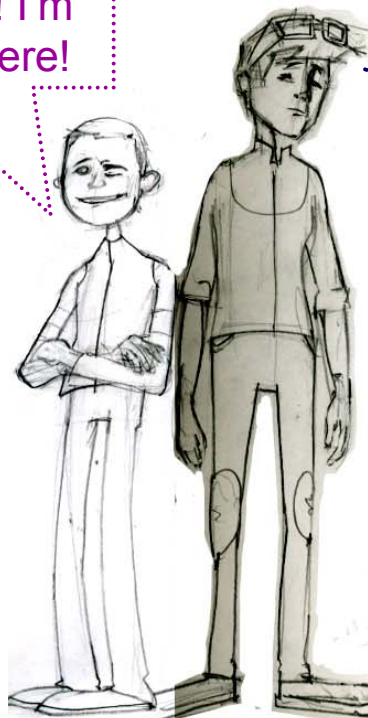
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Early School Leaving

School? Forget it! I'm  
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Transition from  
Higher Education

Why don't they teach  
you at uni what you  
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Workers with low skills

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Ingrid  
32 years

Online survey on 3 personas  
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6-8 questions per theme;  
**N=54** respondents



## Institutional Change

I'm bored. Why can't I go to uni already?

### Inclusion

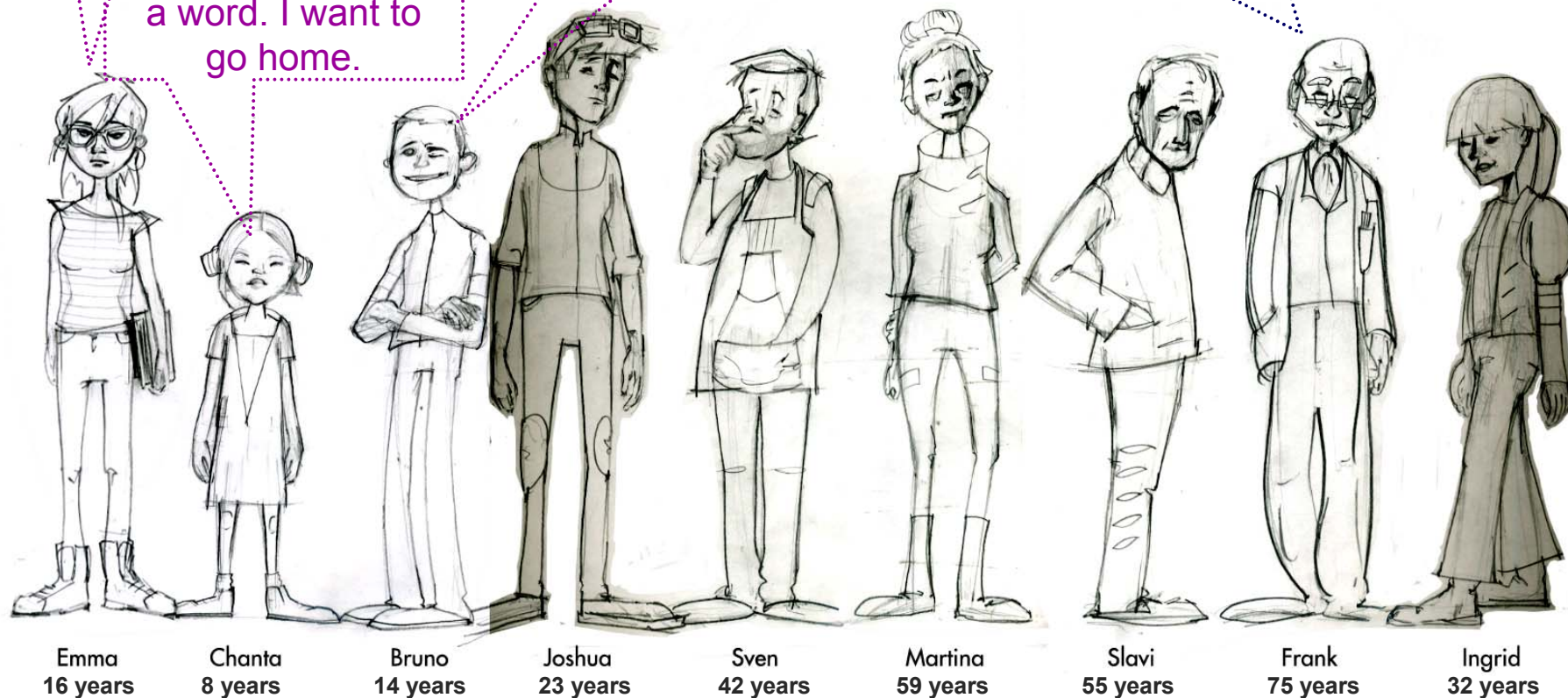
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### Early School Leaving

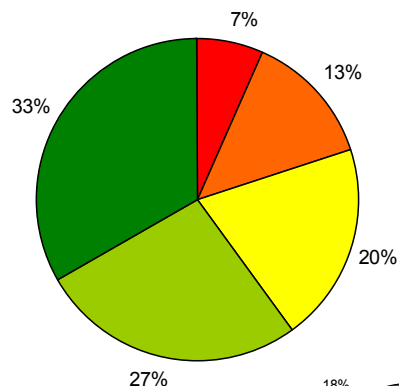
School? Forget it! I'm not going back there!

### Teacher roles

Pedagogy remains important, teachers need to learn from one another

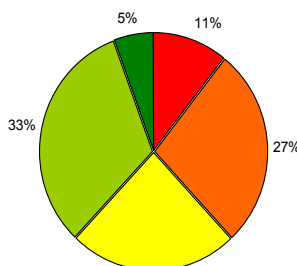
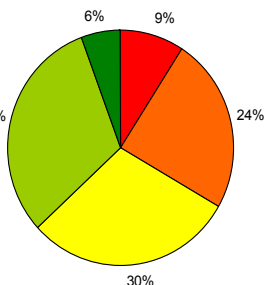
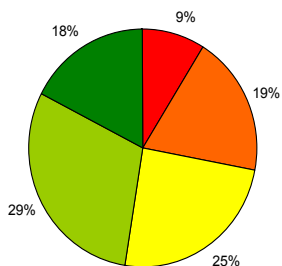


## In 2025, early school leaving will be a greater problem



 **strongly disagree**  
 **disagree**  
 **undecided**  
 **agree**  
 **strongly agree**

Bruno



**risks**

Possibly more  
Informal Learning  
Opportunities

Possibly rising  
expectations

Possibly rising  
social divides

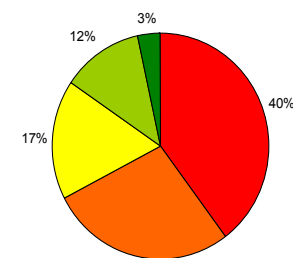
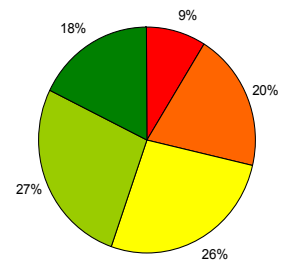
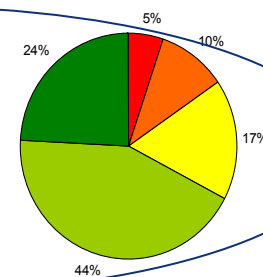
**Factors  
determining policy action**

**chances**

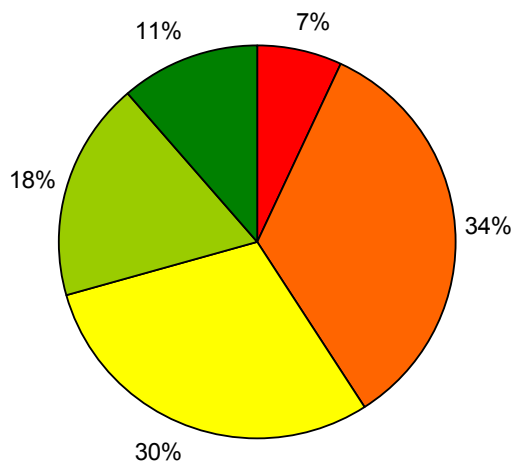
Variety of  
personalised ways to  
obtain degrees

Possibly the  
recognition of  
informal learning

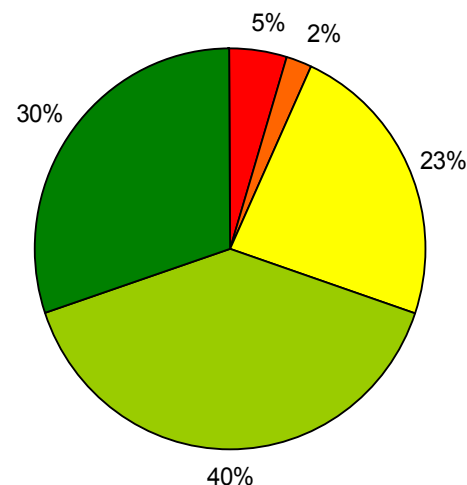
Schools **will not** have  
disappeared  
altogether



**N=54**



In 2025, existing structures of formal education and training **will not** have remained intact








Need to involve different stakeholders to transform E&T

N=45

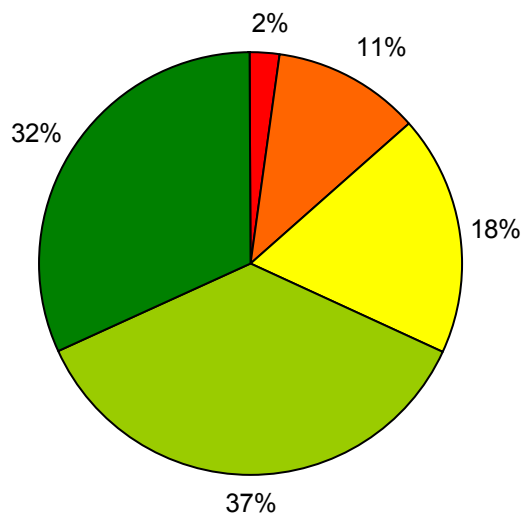
**In 2025, existing structures of formal education and training will have remained intact**

**Schools could become 'learning centres' which will guide you in your 'learning career'**

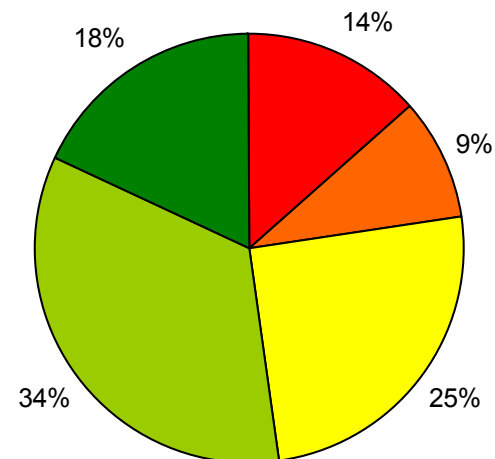
-  **strongly disagree**
-  **disagree**
-  **undecided**
-  **agree**
-  **strongly agree**



Emma



**Political leadership and greater openness and flexibility required to address multiculturalism**



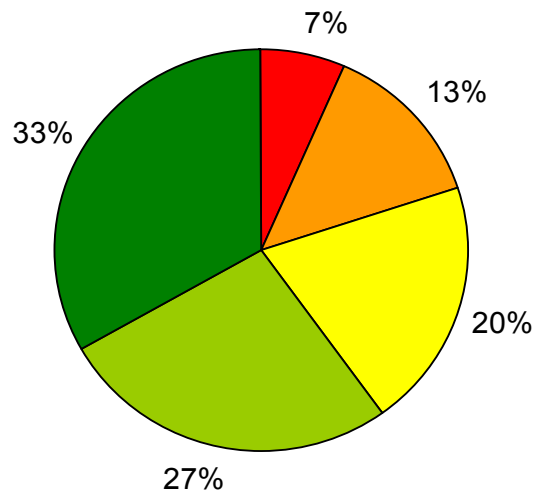
**Technology will widen the gap**

**N=45**

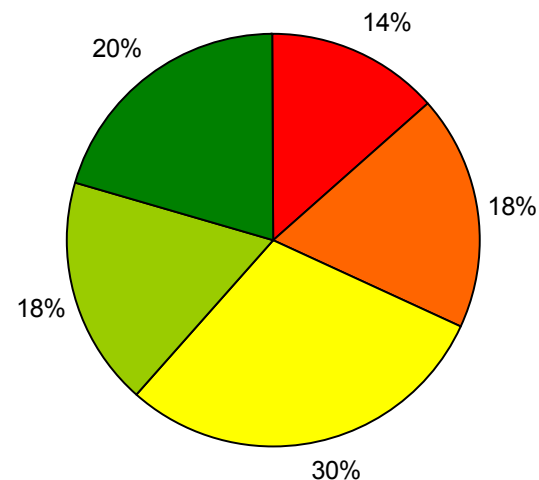
- strongly disagree
- disagree
- undecided
- agree
- strongly agree

**Schools could become learning and living spaces that welcome diversity and actively promote integration and inclusion**

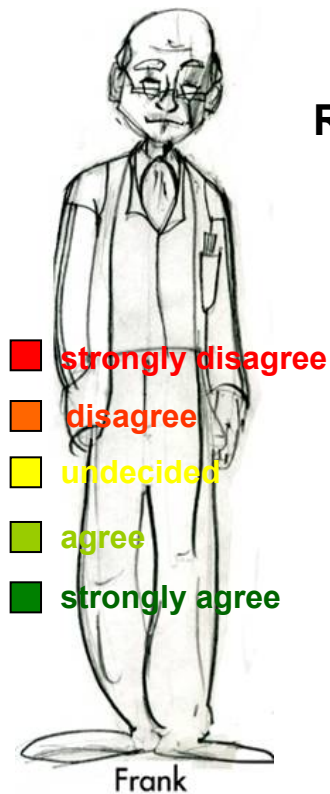




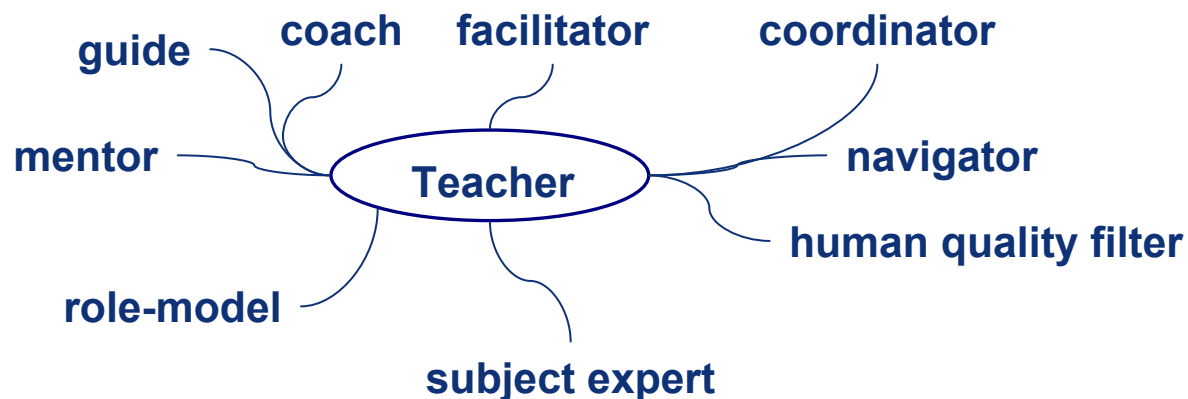
**Rise of expert & peer teaching**



**Teachers might perhaps become knowledge coordinators**



- strongly disagree
- disagree
- undecided
- agree
- strongly agree





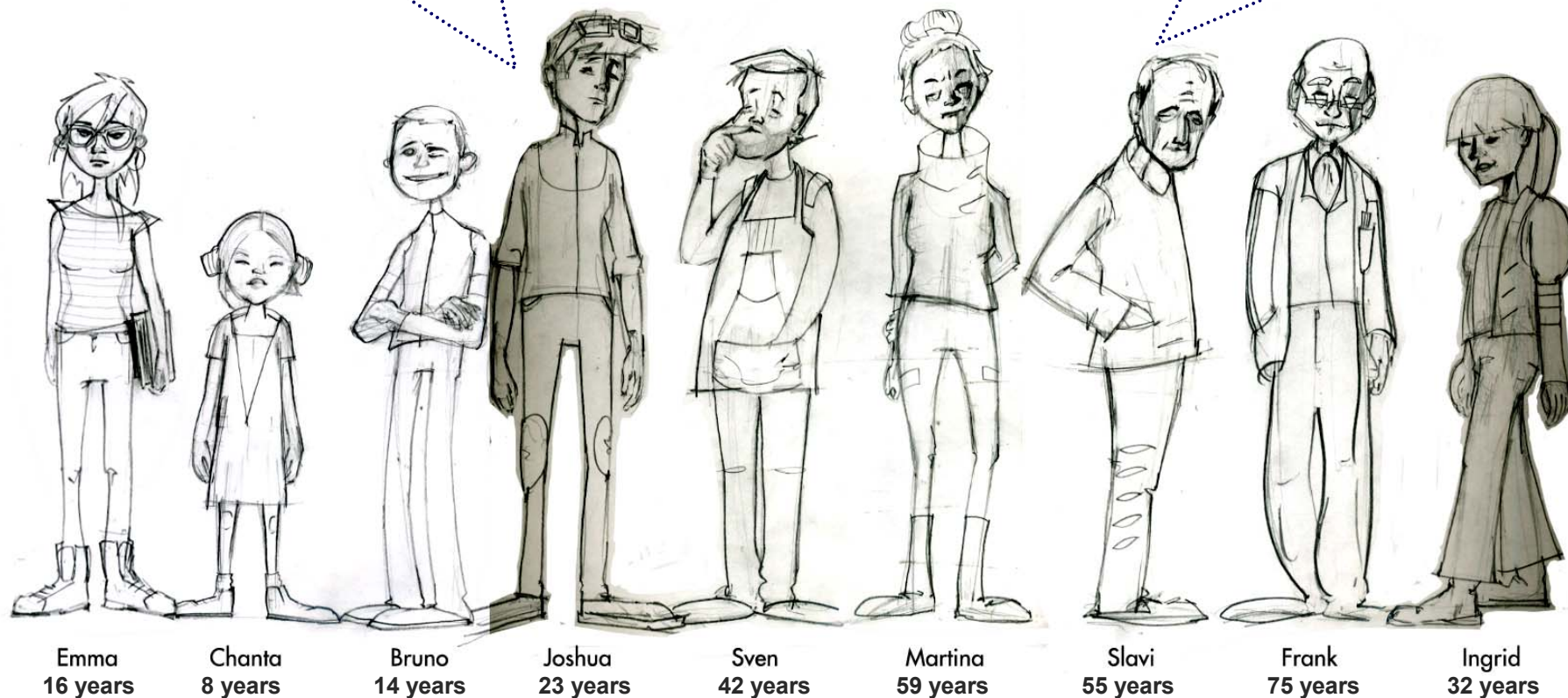
- **Institutions** will need to open up to society; respond more flexibly to learners' needs; become learning communities  
→ Promote inter-institutional collaboration  
Build on eTwinning; increase efforts to link secondary and tertiary E&T
- **Teacher** roles will expand and diversify;  
→ Collect Good Practice; encourage exchange & networking (eTwinning); work towards a common framework for teacher training
- **Personalised** and engaging learning opportunities are key for addressing all learners' needs  
→ Encourage experimentation, exchange and ICT take-up

## Transition from Higher Education to the workplace

Why don't they teach  
you at uni what you  
need to find a job?

## Up-skilling

I need to improve my  
soft skills, but I don't  
want them to know...



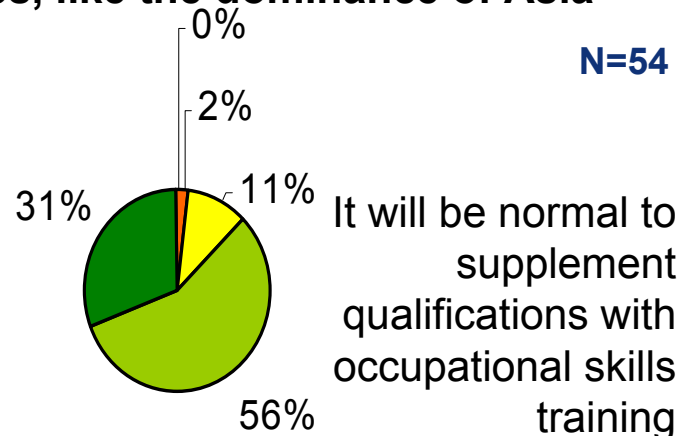
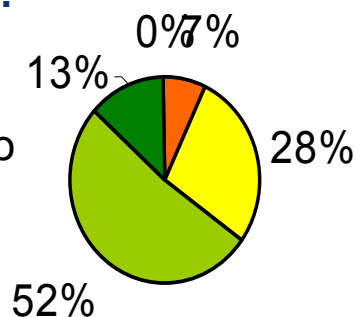
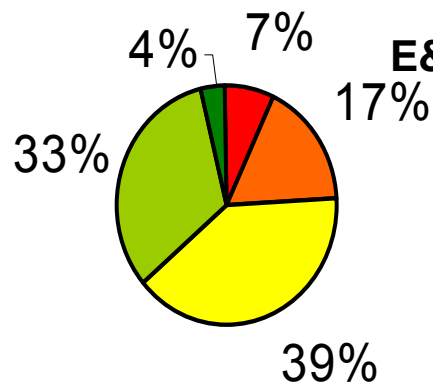
## Responsiveness of E&T to labour market needs

**E&T will have reacted to global changes, like the dominance of Asia**

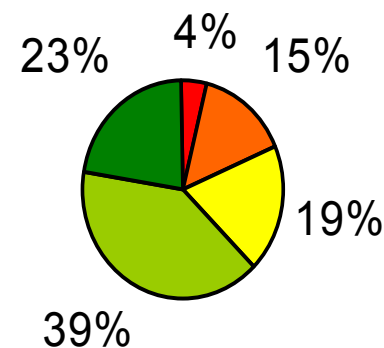
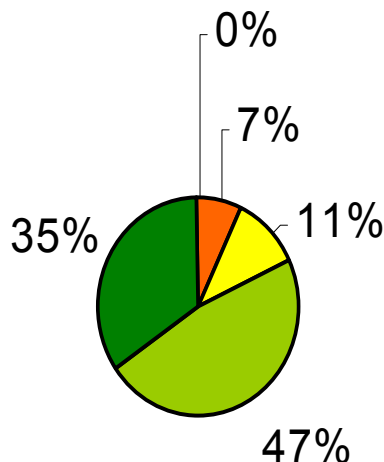
**N=54**

### What will change?

Recent graduates  
are not expected to  
possess job-  
relevant skills

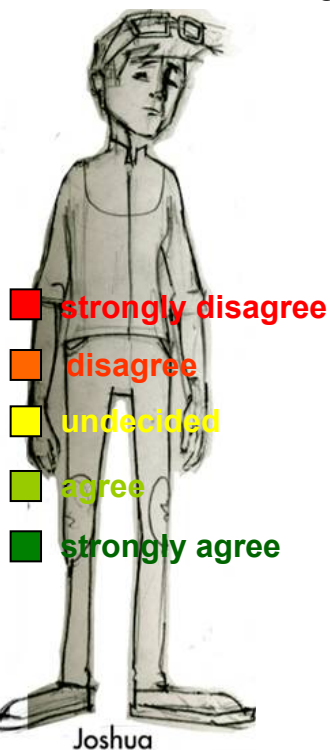


### To prepare learners for future job and skills requirements...



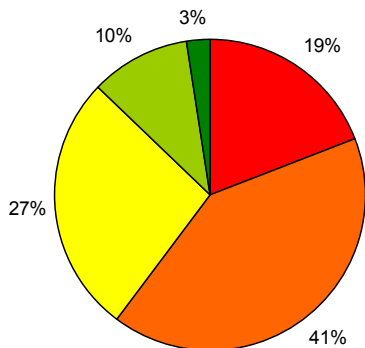
E&T institutions have to work  
closer together with industry

Transversal skills become more  
important than special skills

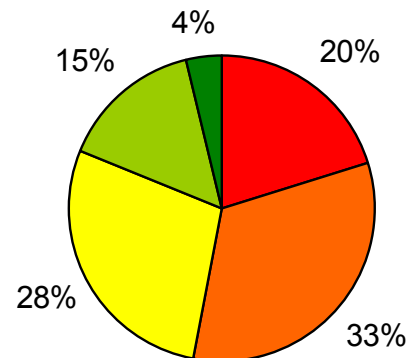


In the future, up-skilling becomes more important because:

N=89



Seniority and merit will **not** remain the main criteria for promotion

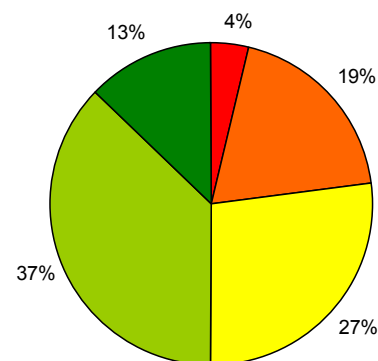


The skills needed for a new post will **not** develop automatically

- strongly disagree
- disagree
- undecided
- agree
- strongly agree

Up-skilling will become easier:

Sophisticated training tools make it easy to up-skill



Slavi

- E&T needs to better anticipate changes and enter into a dialogue with industry on future skill needs
- Transversal skills become more important, e.g. learning to learn and digital literacy



## Re-entering the labour market

## Re-skilling, high qualifications

## Re-skilling, low qualifications

I would like to  
open my own  
business...

I am highly qualified  
– but my job has  
become obsolete...

How do I qualify  
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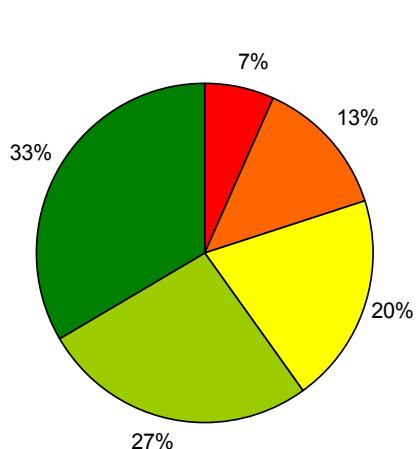
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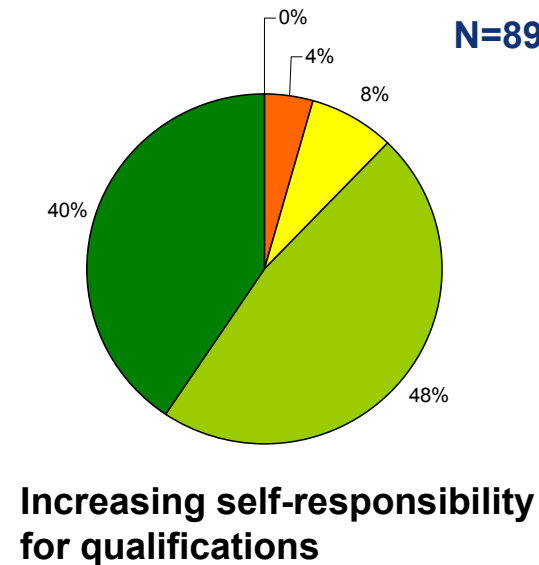
Frank  
75 years

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32 years

## What will change?

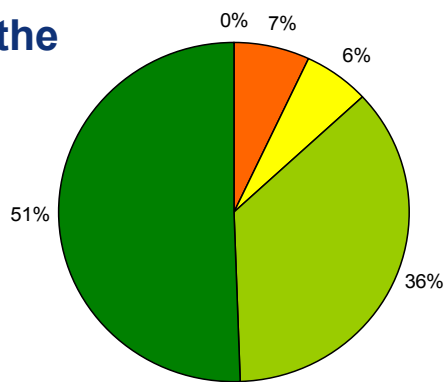


It will be common for citizens to change their professional profiles completely

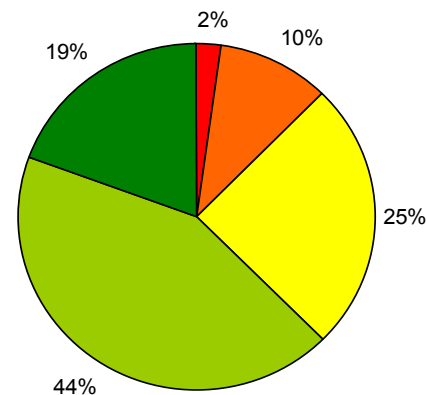


Increasing self-responsibility for qualifications

## What will people who are re-entering the labour market need?



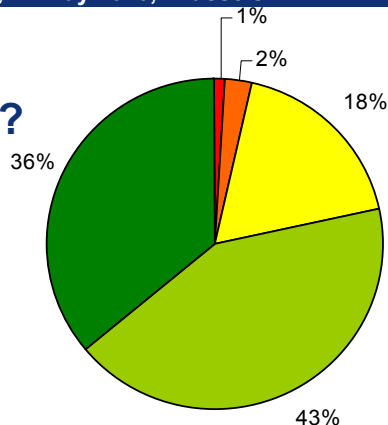
Recognition of informally acquired skills



Practical skills training (without degree)

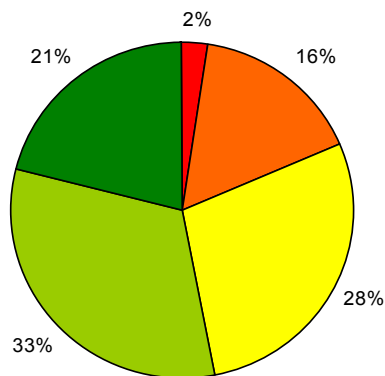


## What will change?



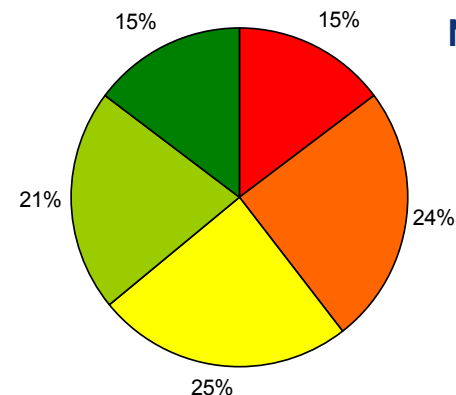
## Labour Market Trends

More jobs will become obsolete and others newly created



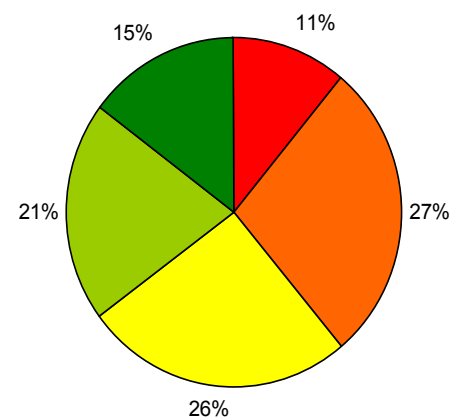
Re-skilling & changing professional profile will become normal

## Consequences



N=89

Higher skilled workers will **not** face more difficulties than lower skilled workers



For older workers, it will be very difficult to re-qualify – **or not**

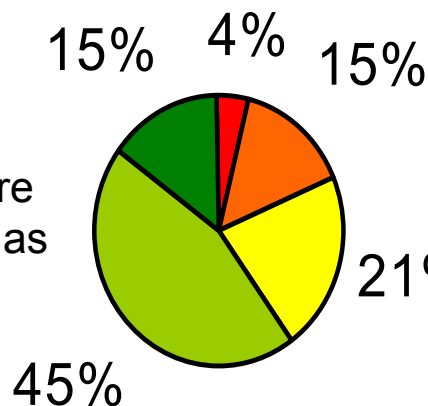


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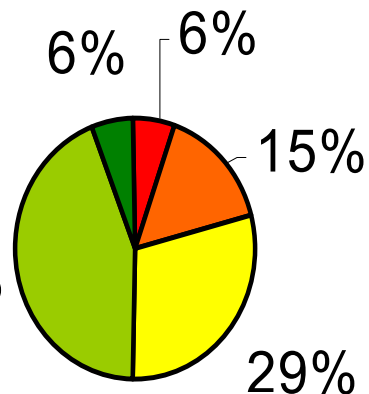
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N=54

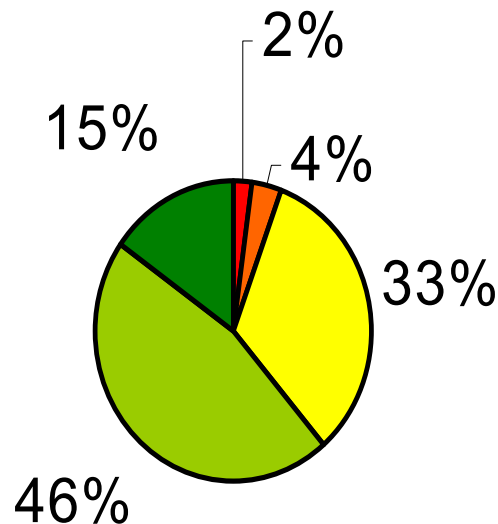
Nearly all jobs require higher level of skills as today



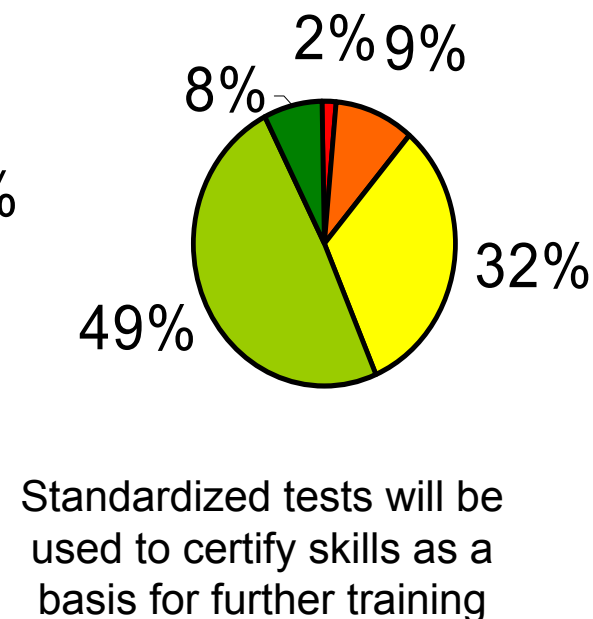
Jobs that require no/low skills will mainly be physical



## What do people with low qualifications need?

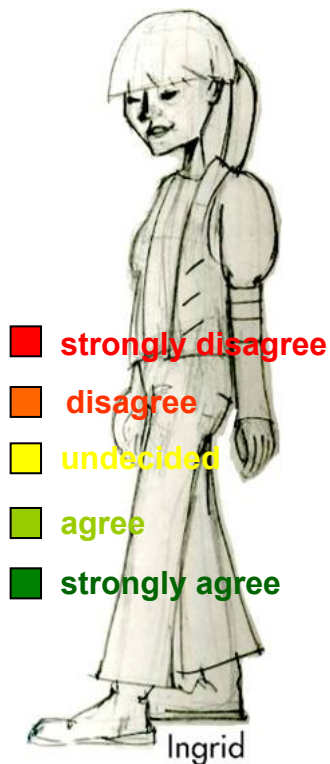


Informal learning experiences will be recognized



Standardized tests will be used to certify skills as a basis for further training

## Recognition of informal learning



- strongly disagree
- disagree
- undecided
- agree
- strongly agree

## Main trends

- Changing professional profile will become normal;
- Increased self-responsibility for training and skills updating;
- ICT will be used to support personalised training, e.g. simulations and autodidactic training programs.

## Main policy challenges

- **certification of informally acquired skills**
  - Expand work on the EQF
- **preparing citizens for change**
  - identify and promote key competences that enable citizens to become lifelong-learners

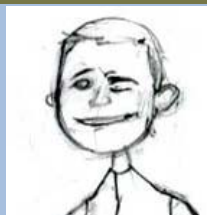


## Children & Youth

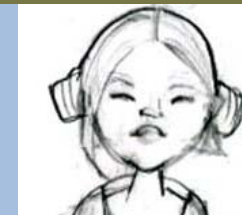
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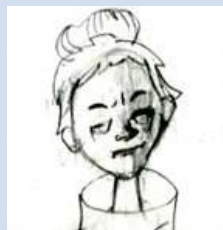
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## Qualifying for a job

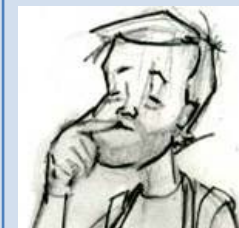
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## Skills development

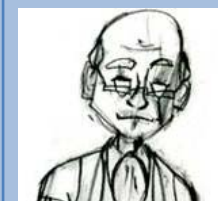
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Children &  
Youth

## How will schools meet future learning needs?

Personalised Learning  
Institutional Flexibility  
Investing in Teacher Training

Qualifying  
for a job

## How can demand & supply of skills be matched?

Anticipate change  
Dialogue with industry and other stakeholders  
Enable citizens to adapt and develop

Skills  
development

## How can people continuously update their skills?

Take responsibility for your learning & career path  
Make use of various and versatile ICT tools  
Certification of informally acquired skills



Thank you very much!

Christine Redecker  
[christine.redecker@ec.europa.eu](mailto:christine.redecker@ec.europa.eu)

[www.futureoflearning.eu](http://www.futureoflearning.eu)