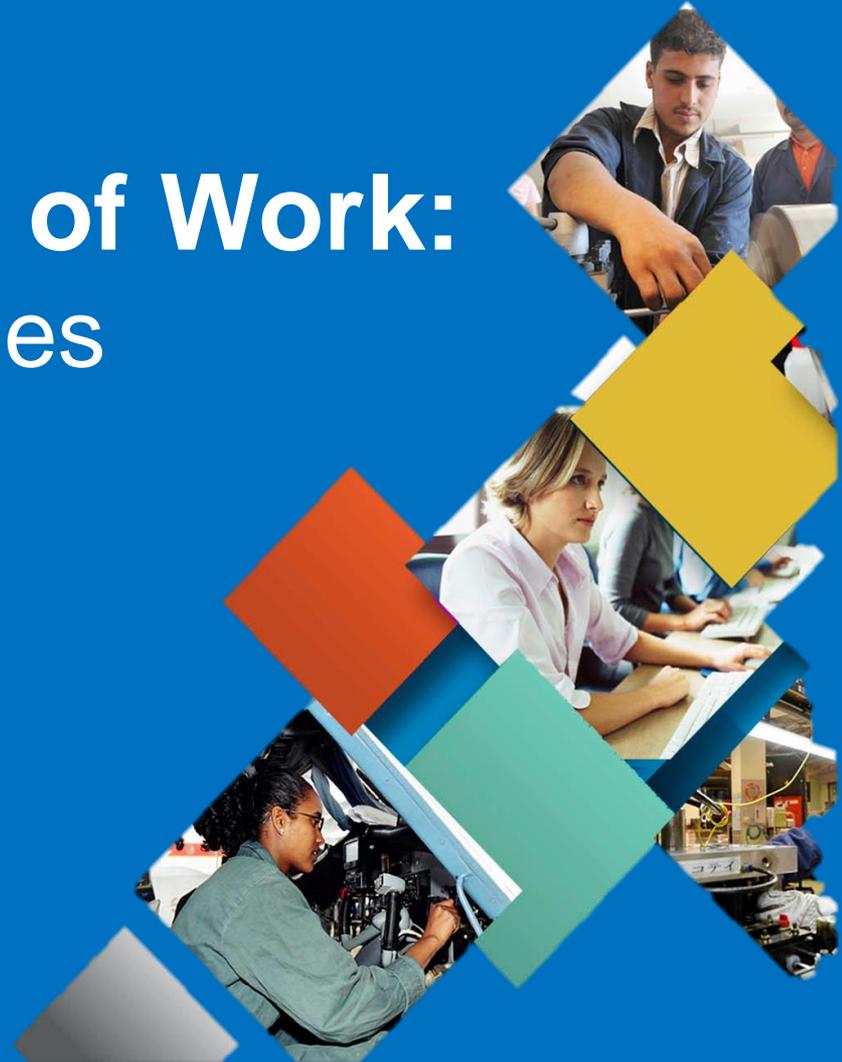




Skills and Future of Work: Challenges and issues

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This presentation



- Some global drivers of change
- Impact on skills
- What it means for skills development
- Based on work which contributes to the current debate on FoW



Driver of change: Technology and innovation

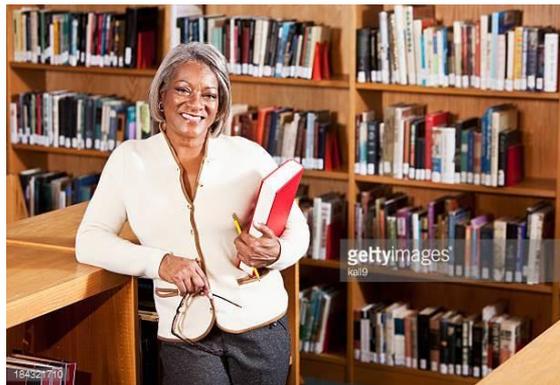


- The pace of change
- Not only robotisation
- The internet of things
- 3d printing /AM
- Infrastructure innovation projects
- Interdisciplinarity (e.g. biotechnology)

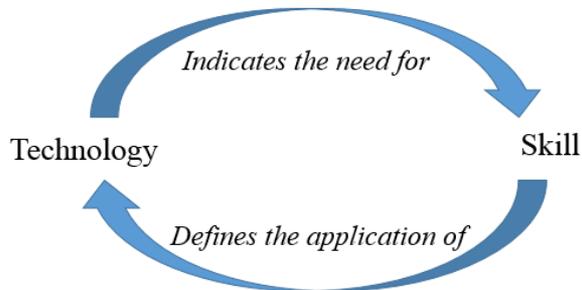


The wrong question: how many jobs are at risk?

- Half in advanced economies (Frey, Osborne 2013),
- Asia - around 56% (ILO, 2016)
- Some argue – potentially all
- Automatable \neq will be automated
- Not likely any time soon in developing countries
- **Opportunity:** one tech job generate 5 indirect jobs!
- Tasks and skills that change



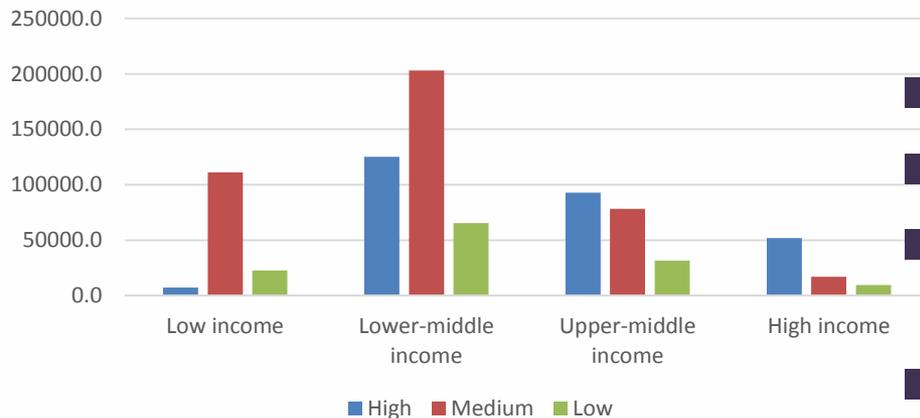
Technology and innovation: Skills impact



■ Which skills will secure jobs?

- STEM skills at all levels
- ICT and coding skills
- Skills that help to adopt, operate and maintain technologies
- Skills that help to create a business case, market and manage technologies adoption

Employment growth by skill-level of occupations
2000-2021



Source: ILO modelled estimates, 2016

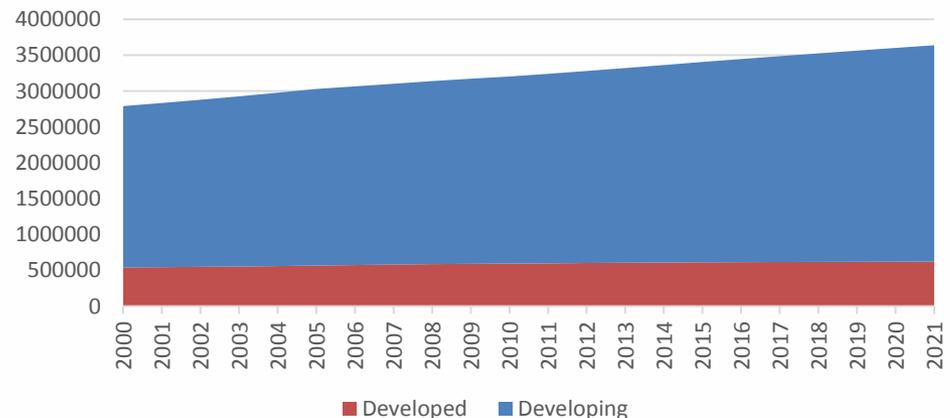
- Creativity
- Social skills (interaction, care)
- Non-automatable high-manual dexterity tasks
- Mitigate the negative impact of job losses

Driver of change: Demographic change



- Slowdown in working-age population growth
- But the pace of labour force growth outstrips job creation
- 71 million young people worldwide are unemployed
- 40 MIO people enter labour market annually: between now and 2030 - 600 MIO new jobs needed to keep current employment rates (majority of them in Asia and Sub-Saharan Africa) (WDR 2013)
- **The developed world is ageing fast**
- **Workers of the future are older workers**
- **Labour shortages are expected**

Labour force projections (thous.)
(ILO modelled estimates 2016)



Demographic change: skills impact

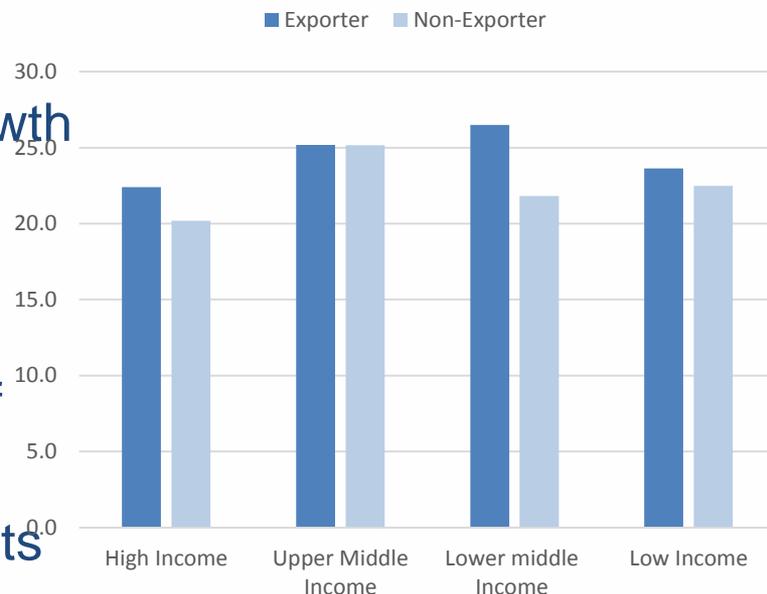


- The global competition for talent
- Higher global mobility of labour expected
- Growing skills mismatches and economy slowdown – result of aging
- Lifelong learning
- Activation measures (older workers, women)
- Shortage of labour predicted, especially trained in upper secondary TVET and tertiary education degrees
- Skills availability is a challenge to attract investors and create jobs

Driver of change: Globalization and trade



- GVCs, redistribution of work, offshoring and reshoring
- Trade openness can promote economic growth and employment creation
- Exporting firms tend to be larger, more productive and employ higher skilled labour
- Skills are key for both quantity and quality of export growth
- Key to economic diversification (new products and services, markets, technologies)
- The dispersion of skill levels also affects countries' comparative advantage in trade
- Skills play a role of a buffer helping to reduce adjustment costs
- Offset the tendency of trade to drive increases in income inequality
- Key for companies' ability to move up in the value chain



Globalization and trade: skills impact



- targeted skills training in skill intensive sectors that benefit from trade expansion (STED)
- targeted measures to mitigate unemployment and address equity (gender, youth, aging workers)
- policy coherence between trade and skills development
- core work skills (portable!)
- addressing specific skills such as marketing, compliance with standards and regulations, quality control, food safety, products labelling, product design and product development, supply chain management and procurement etc.

Other drivers



- Change in work organisation
- Mobility of labour
- Transition to environmental sustainability and a low carbon economy
- Educational attainment



Skills development systems



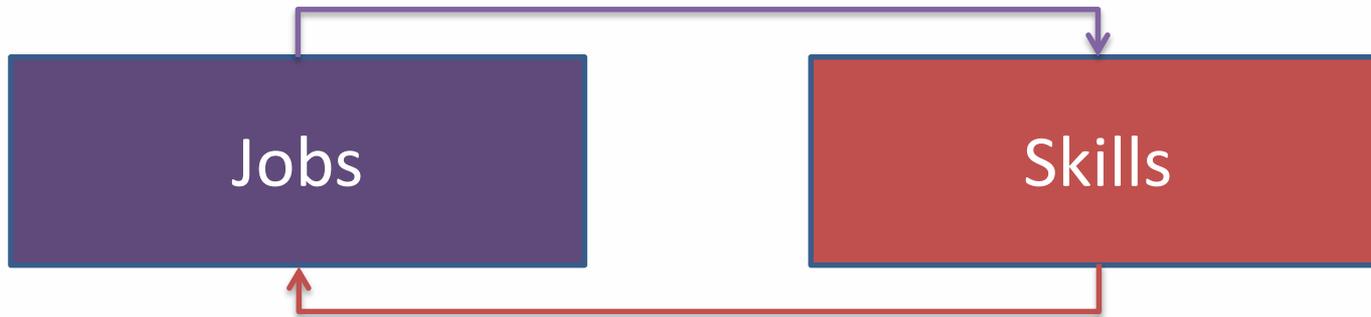
- Foundation skills. Basis for LLL!
- LLL and access – financing and incentivising employers and individuals.
- Core work skills – transferable and employability skills! Can't be «tought». Not prioritised by systems.
- Having a profession increases employability. TVET – new universal basic?
- More role of the private sector to develop job specific skills? (but what about «virtual» workers?) Incentives for workplace learning.
- Role of MOOCs and digital learning platforms vs role of schools.
- Teachers' training! Are *they* ready for blended learning?
- Competency sandards and NQFs: the more advanced, the heavier. What will be the strategy of standardisation of learning outcomes?
- Future talent pipeline requires much more flexibility in skills delivery. Refashion modularised training?

Skills development systems



- A pressure on skill needs anticipation but is the task doable? Can real time / big data help?
- Foresight – a change management tool
- Social dialogue – the means to understand and mitigate the change
- Sectoral approaches: a way to establish a dialogue between the WoW and training
- ALMPs – low skilled, job seekers (beyond the unemployed!), disadvantaged groups
- Skills utilisation: measures to retain, recognise and attract talent go way beyond skills measures

A feedback loop

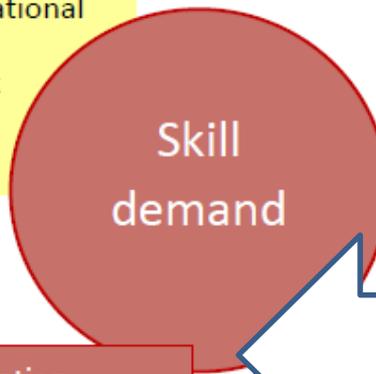




Challenges

- Technology and innovation
- Globalisation of markets
- Demographic changes
- Climate change
- Increasing educational attainment
- Changes in work organisation

Global drivers of change



Coordination!



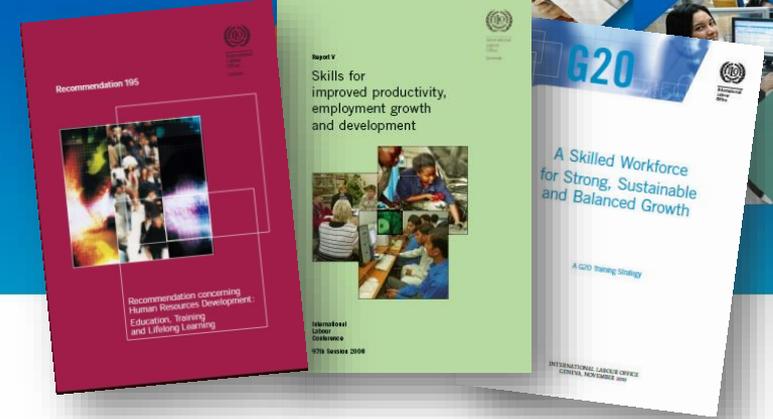
Response choices

- Better skills utilisation,
- Measures to improve retention,
- Improving work conditions,
- Business strategies based on capabilities and human capital investment,
- National / sectoral policies and regulations

- National / sectoral education and training policies and regulations,
- Lifelong and workplace learning,
- Activation measures ,
- Skilled migration and workforce mobility,
- Skills matching and retraining through employment services



ILO Skills Policy Framework



- The key role of the identification of skill needs in the dynamic framework of objectives of skills development policy
 - for today's labour market (reduce skills mismatch) and
 - for tomorrow (prepare for technologies and industries with growth potential);
- Skills development itself could be an important driver of change if skills are an integral part of employment, industrial, technological, environmental and other policies
- Anticipating future skills needs is recognised as the first building block of the G20 Training Strategy

Thank you!



“When the winds of change blow, some seek shelter, others build windmills” – an old Chinese Proverb