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International Centre for
Technical and Vocational
Education and Training

Learning Forum

Striving for Excellence, Shaping Skills Development and Strengthening Global Collaboration in TVET

Presented by Mr. Borhene Chakroun, Director, Policy and Lifelong Learning Systems, UNESCO



- ① Major transitions that affect supply of and demand for skills including green and digital skills
- ② Current bottlenecks and gaps slowing down the transitions
- ③ UNESCO's initiatives and ideas for the future

Education and Training can not only respond to the changes in the world of work, it can also shape it.

Economic uncertainty	Technological change	Labour Market dynamics	Demographic transition	Societal and political issues	Sustainable Development
2020 recession and long-term impact of COVID Slow and uneven growth	Digitization, Automation, 5G, Generative-AI, leading to Industry 4.0	Labour shortages Informal economy Loss and creation of jobs	Youth bulges vs ageing populations and impacts on education and training systems	Right to lifelong learning, intergenerational solidarity, migrations	Climate change, biodiversity, green transition

GROWTH PROJECTIONS

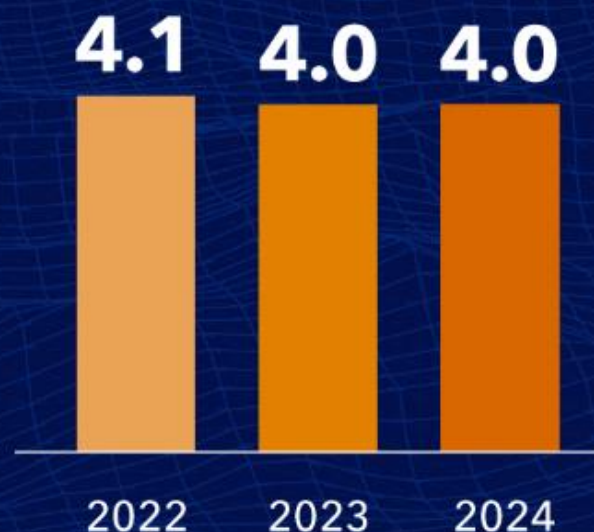
GLOBAL ECONOMY



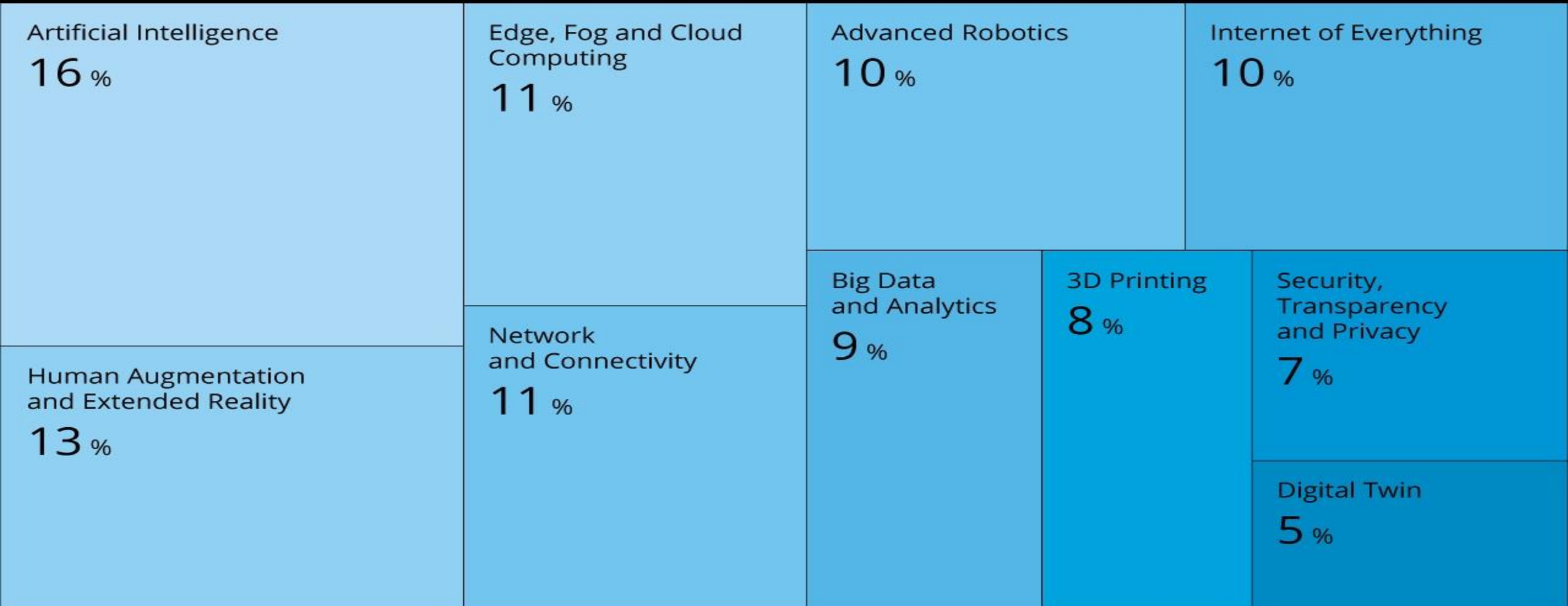
ADVANCED ECONOMIES



EMERGING MARKET & DEVELOPING ECONOMIES



Top 10 Industry 4.0 Trends & Innovations in 2023



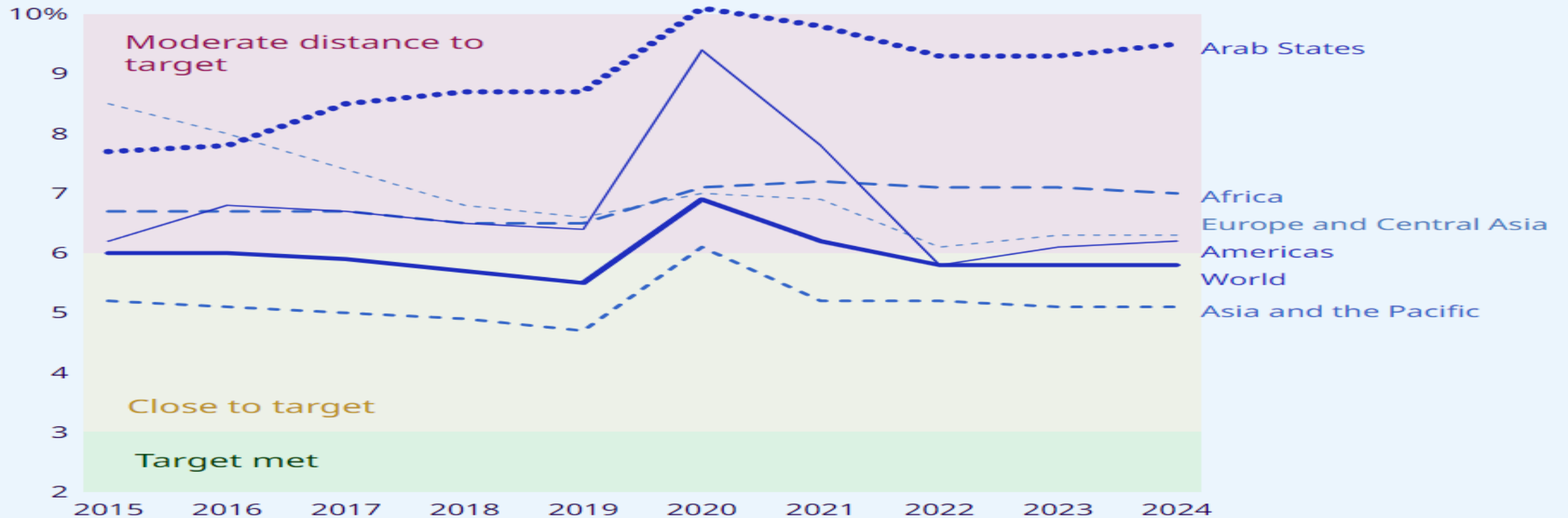
This tree map illustrates the top 10 innovation trends & their impact on the Industry 4.0

StartUs insights

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January 2023

Uneven Situation of Labour Markets

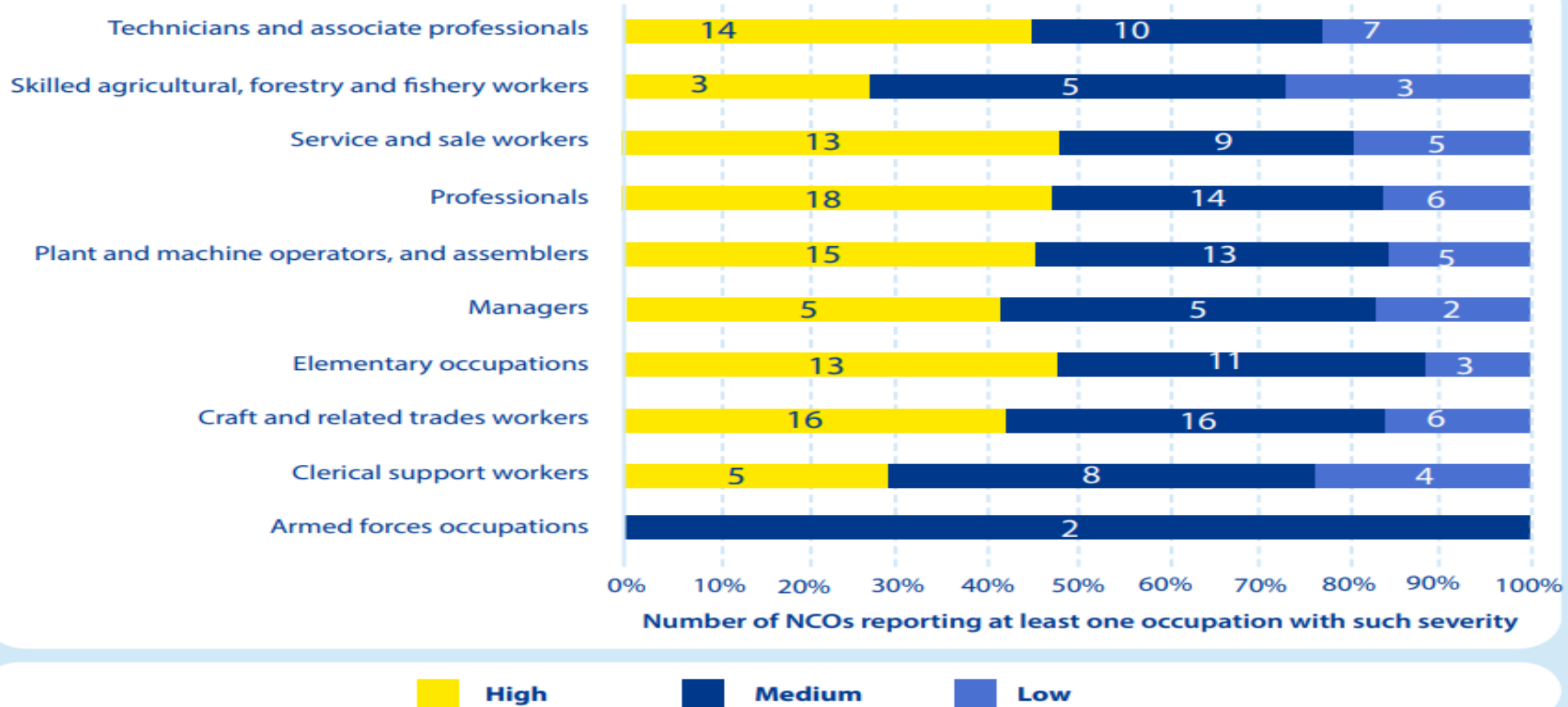
► Unemployment rate



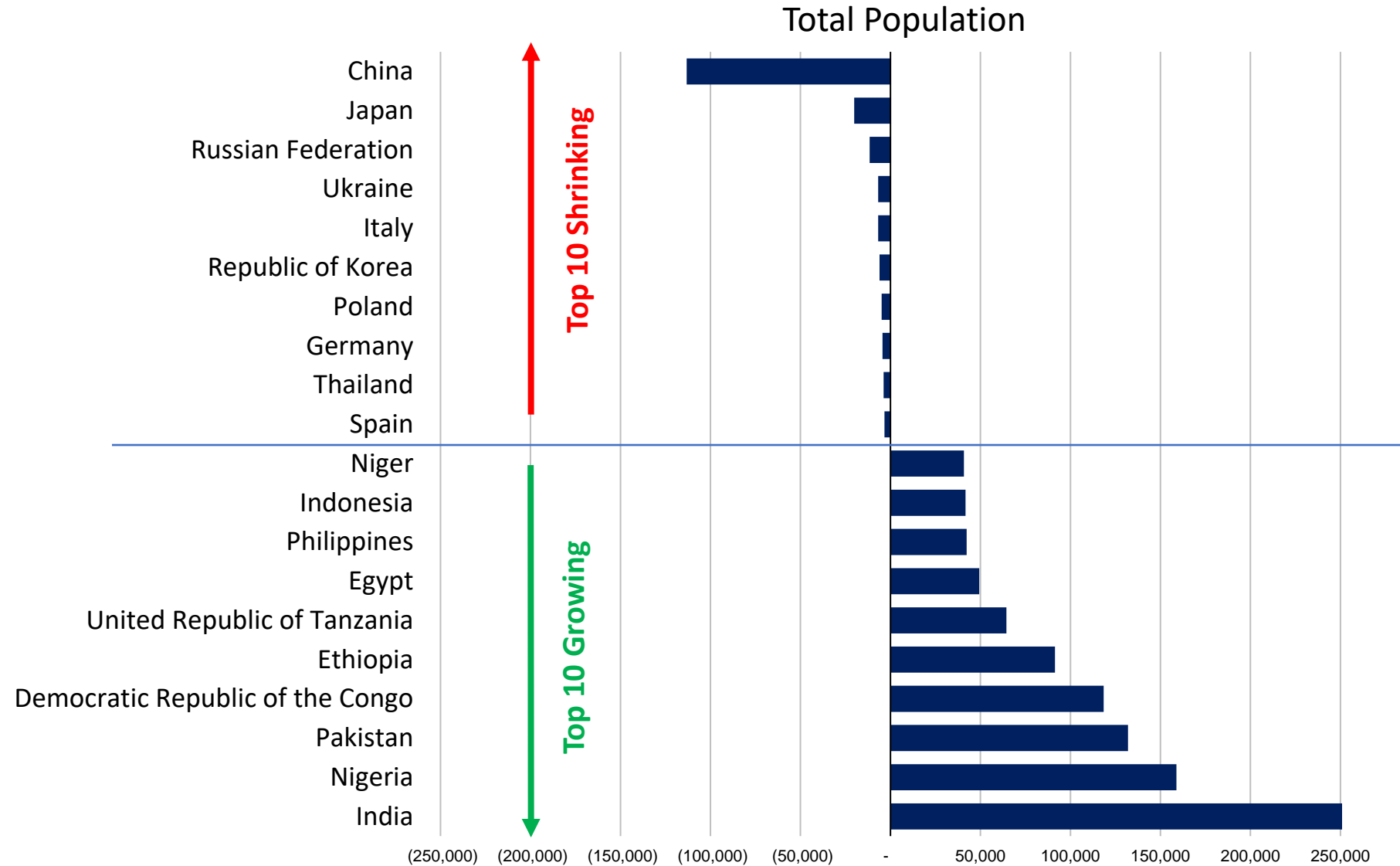
The target unemployment rate of 3 per cent is based on the UNSD threshold described in the [SDG progress chart technical note](#). The color coding indicates the distance to this target.

Source: [ILO Modelled Estimates database, ILOSTAT](#) • [Get the data](#)

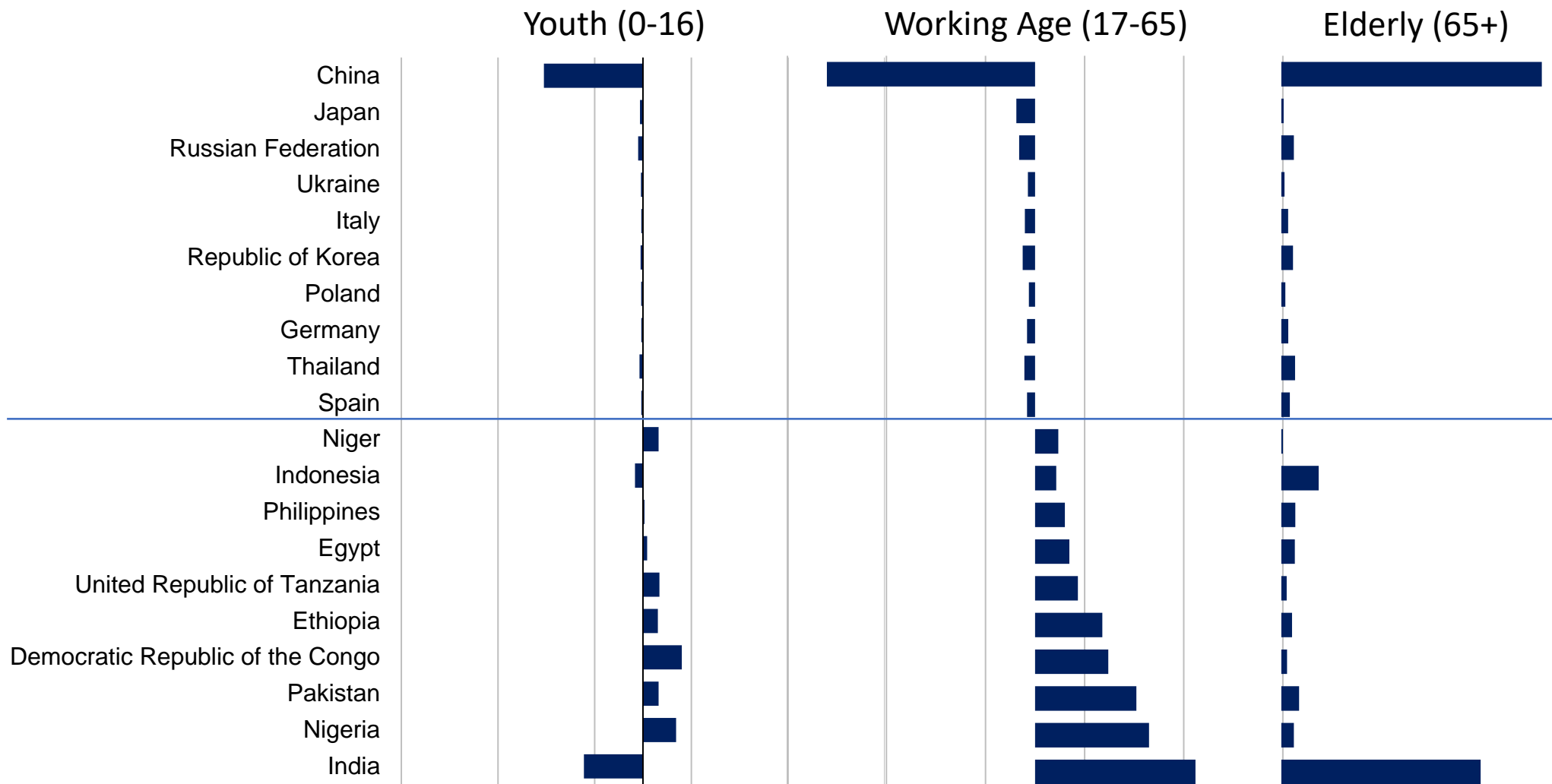
Labour Shortages: Severity of shortages by broad occupation group in Europe, 2022



Demography (1/2)



Many low-income countries today will have huge prime-age labor forces for the first time (2/2)



Technology and labour markets



- 32% of young women and 15% of young men 15-24 years worldwide were NEET (Nov. 2022)
- Over 763 million youth and adults (2/3 women) lacked basic literacy skills in 2020
- In spite of the post-pandemic recovery, 70.1 million youth 15-24 years (14.1 % of the age group) remained unemployed in Nov. 2022

- 58% of global employment is in the informal sector
- Technological change is challenging formal employment and the associated worker benefits (e.g., approximately 43 million are engaged in the gig economy)

- AI, automation, and other advanced technologies including clean technology, require new skills to succeed in the labour market.

Sources:

UNESCO (2022); ILO/Caro et. al. (n.d.)

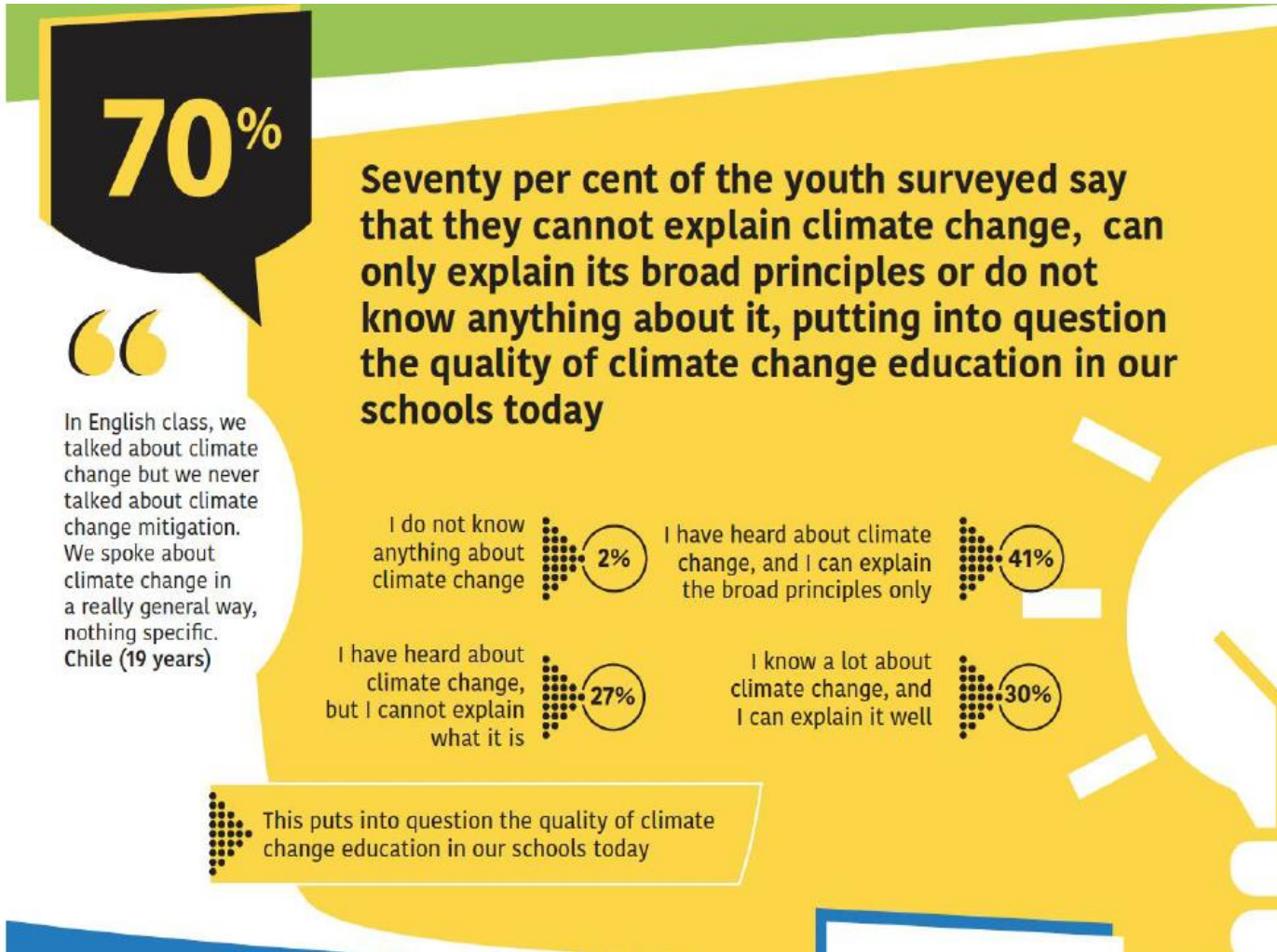
Skills Forecasting Challenges: Good on Trends, Bad on Pace



- Osborne, M. A., & Frey, C. B. (2013). "The future of employment: How susceptible are jobs to computerization?"
- McKinsey Global Institute (2017)
- PWC, Analysis and Reports on Impact of Automatisation (Various dates)
- The WEF 2020

- By 2020s, 47% Jobs in US at risks of Automatization
- 14-15% Jobs at risks of Automatization
- Up to 30% of jobs could be potentially at risk of automation
- By 2025, automation would displace about 85 million jobs but would create around 97 million new roles.

- The pace and extent of automation will depend on factors such as technology development, labor market dynamics, economic benefits and investments decision, social dialogue and societal acceptance, etc.



Youth demands

The quality of climate change education does not meet the needs and expectations of young people.

Source: UNESCO, 2023, Getting every learner climate ready.

- ① No size fits all
- ② Demography matters
- ③ The Pace of Transitions is uneven

Greening within paradigms: Sustainable Development Goals and SDG4; Human Rights; Leave no-one behind





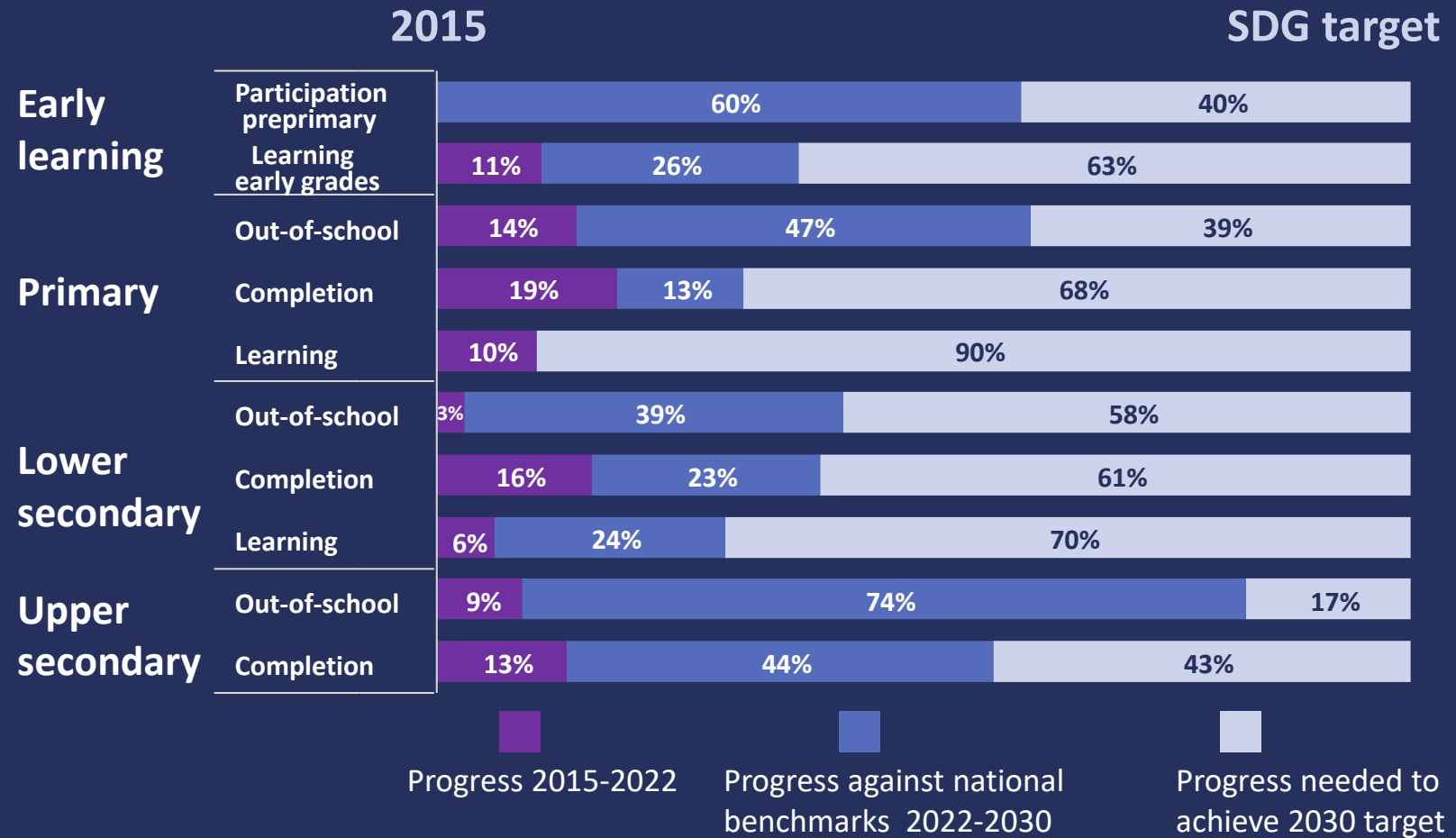
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Institute for Statistics

Global progress towards SDG 4 targets

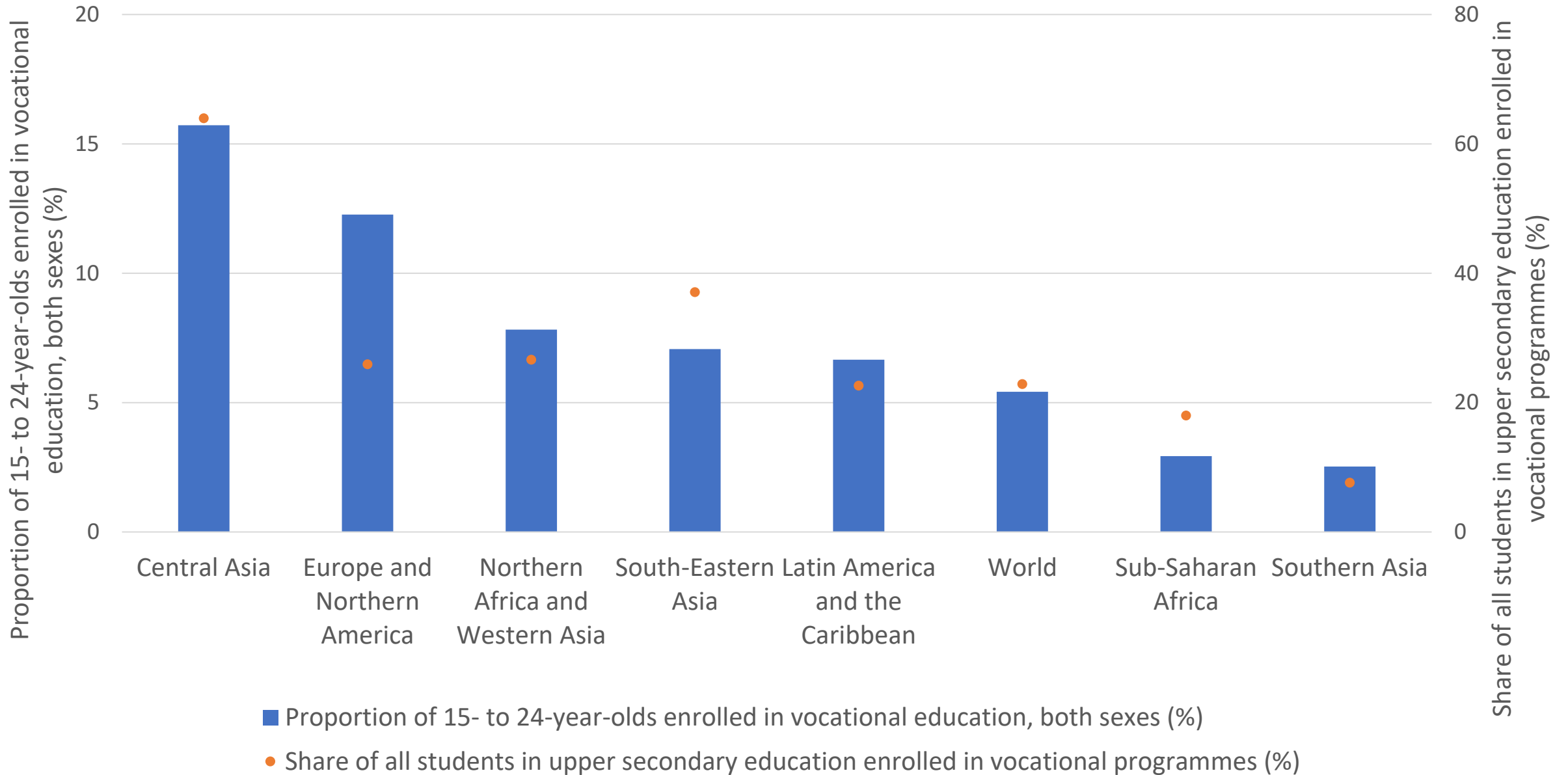
@UNESCOstat data show:

- We have not progressed as much as expected
- Countries are doing better against their national benchmarks, but remain far away from SDG targets

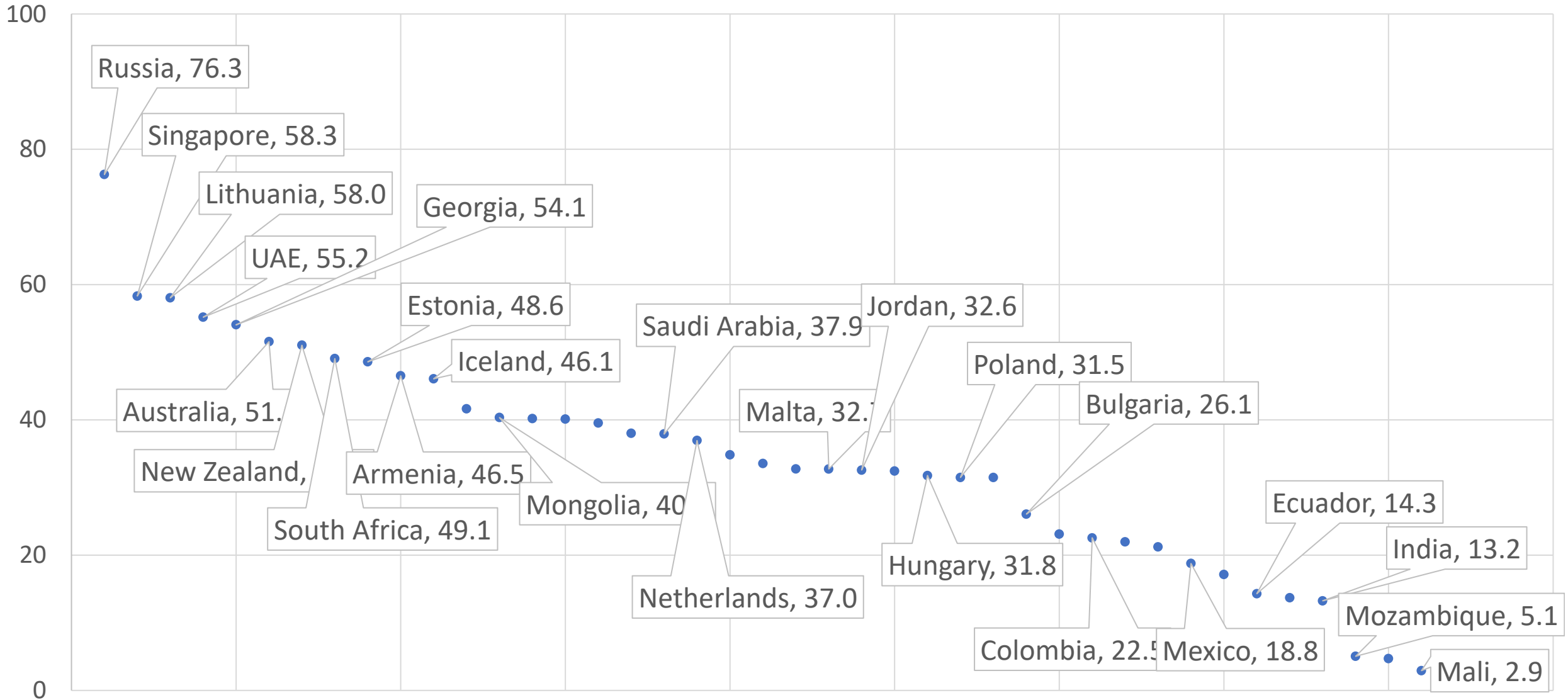


#UISdata

Vocational education indicators (2022 or the latest available year), published by UIS in September 2023



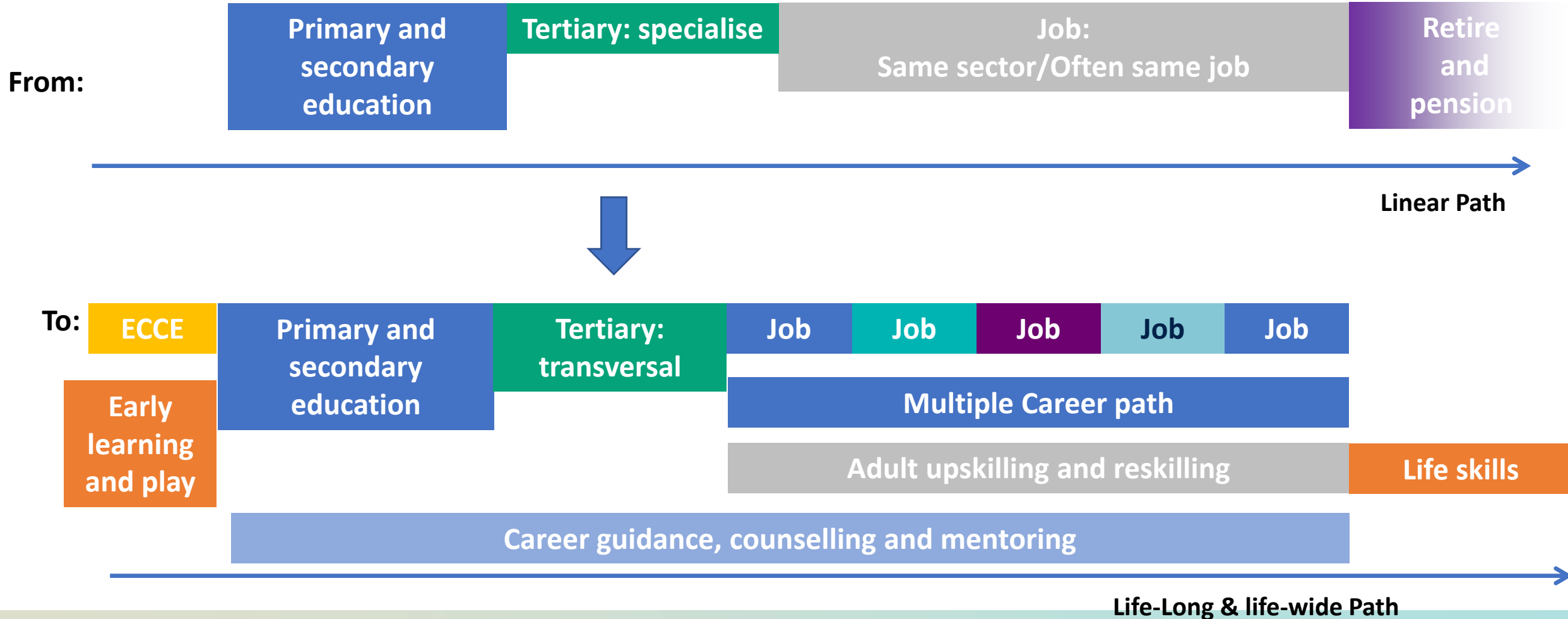
Educational attainment rate, completed post-secondary non-tertiary education or higher, population 25+ years, both sexes (%) (2022 or the latest available year)



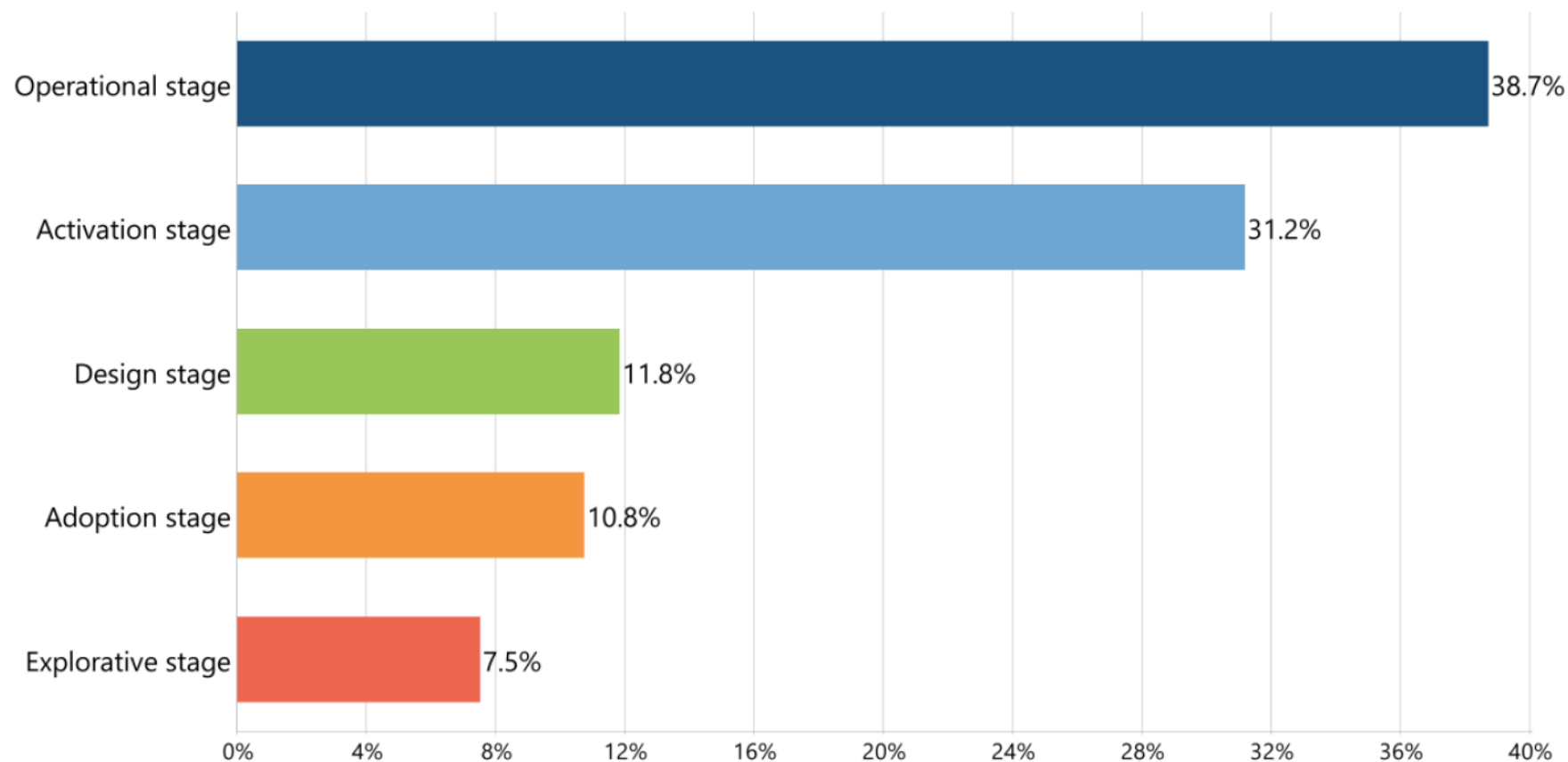


Current
bottleneck and
gaps that are
slowing down
the transition

1. Lack of lifelong Learning Perspective for Skills Development

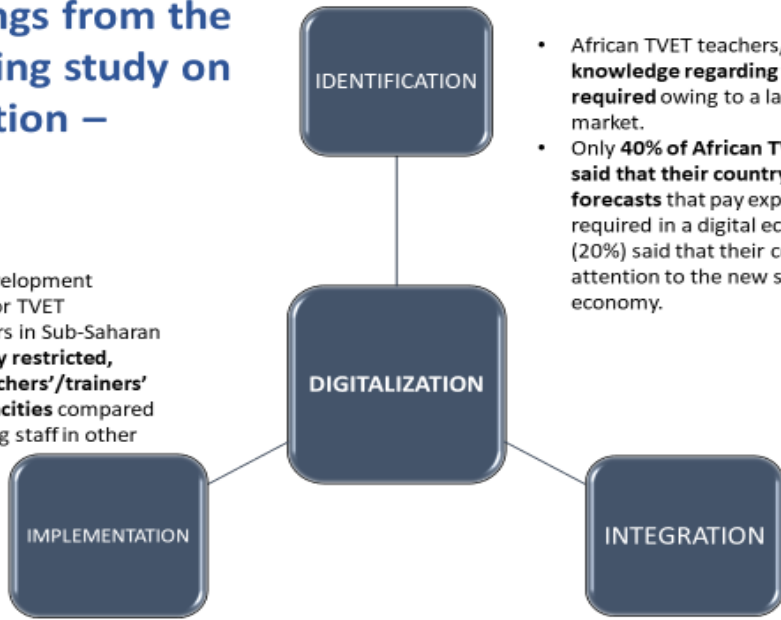


2. Reforms of Qualifications Frameworks are slow: NQFs by stage of development



Key findings from the BILT scoping study on Digitalization – AFRICA

- Digital skills development opportunities for TVET teachers/trainers in Sub-Saharan Africa were **very restricted, resulting in teachers'/trainers' low digital capacities** compared to TVET teaching staff in other world regions.

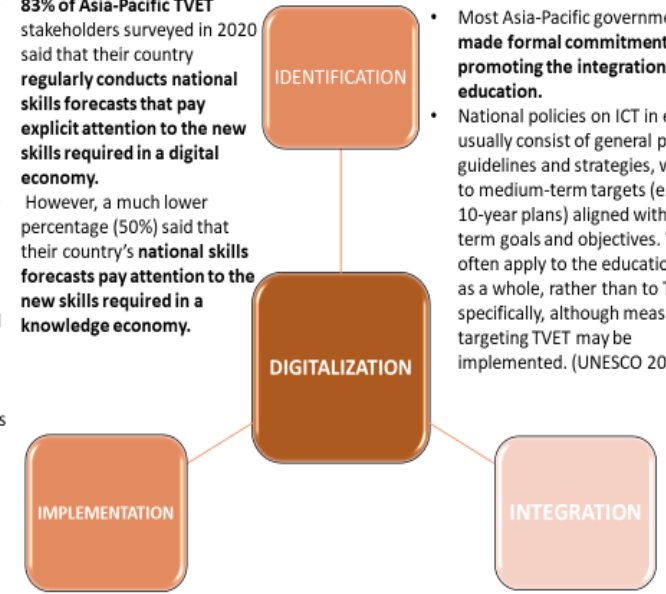


- African TVET teachers/ trainers often have **limited knowledge regarding what digital skills and knowledge are required** owing to a lack of sufficient information on labour market.
- Only **40% of African TVET stakeholders surveyed in 2020 said that their country regularly conducts national skills forecasts** that pay explicit attention to the new skills required in a digital economy, and an even lower percentage (20%) said that their country's national skills forecasts pay attention to the new skills required in a knowledge economy.

- Prior to the COVID-19 pandemic, **national policies on digitalization in education** in most low-income and lower-middle-income countries – the bulk of which are located in Africa - were still in the development stages and tended to target general education, **with little or no attention paid to**

Key findings from the BILT scoping study on Digitalization – ASIA-PACIFIC

- As early as 2015, most governments in the region **had put policies in place to prepare TVET students for the transition to a digital and/or knowledge economy**
- Practices range from offering training in electronic and/or digital technologies; to emphasizing innovation-related (STEM) skills in the TVET curriculum; and integrating electronic and/or digital methods and technologies across the TVET curriculum.
- These policies have had a **positive impact on employers' regard for TVET graduates' digital skills.** (UNESCO 2016)

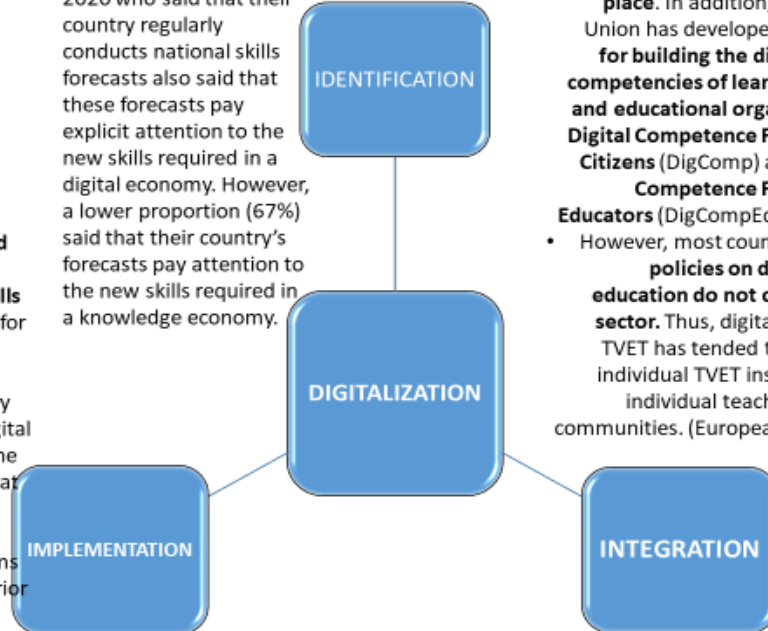


- 83% of Asia-Pacific TVET stakeholders surveyed in 2020 said that their country regularly conducts national skills forecasts that pay explicit attention to the new skills required in a digital economy.**
- However, a much lower percentage (50%) said that their country's **national skills forecasts pay attention to the new skills required in a knowledge economy.**

- Most Asia-Pacific governments have **made formal commitments to promoting the integration of ICT in education.**
- National policies on ICT in education usually consist of general principles, guidelines and strategies, with short- to medium-term targets (e.g. 5- to 10-year plans) aligned with longer-term goals and objectives. They often apply to the education sector as a whole, rather than to TVET specifically, although measures targeting TVET may be implemented. (UNESCO 2016)

Key findings from the BILT scoping study on Digitalization – EUROPE

- Use of digital technologies, **including virtual learning environments, adaptive learning, immersive environments, mobile learning and flipped classrooms, are revolutionizing TVET delivery and strengthening TVET learners' skills and competencies in the use of technologies** for all areas of life. (European Commission 2020)
- Data from the European Commission's SELFIE tool suggests that, while most upper secondary VET teachers across Europe had integrated digital technologies into their teaching practices by the end of 2020, a sizeable proportion (estimated at one-third) had not. (OECD 2021)
- Nearly 60% of TVET providers in Europe and Central Asia had used online and/or other forms of distance learning for courses and training prior to the COVID-19 pandemic, 40% had not.



- 100% of European TVET stakeholders surveyed in 2020 who said that their country regularly conducts national skills forecasts also said that these forecasts pay explicit attention to the new skills required in a digital economy. However, a lower proportion (67%) said that their country's forecasts pay attention to the new skills required in a knowledge economy.

- Most European countries have a **national digital skills strategy in place.** In addition, the European Union has developed **frameworks for building the digital skills and competencies of learners, teachers and educational organizations: the Digital Competence Framework for Citizens (DigComp) and the Digital Competence Framework for Educators (DigCompEdu).** (ETF 2018)
- However, most countries' **national policies on digitalization in education do not cover the TVET sector.** Thus, digital innovation in TVET has tended to be driven by individual TVET institutions or by individual teachers or teacher communities. (European Commission 2020)

TVET is neglected in Digital Transformation

TVET Stakeholders need more and better data

TVET Teaching Workforce Lack Skills for Digital Transformation



The way forward and UNESCO's role

- UNESCO's Strategy for TVET 2022-2029
- UNESCO's Global Education Partnership
- UNESCO's Global Skills Academy
- Three Ideas for the Future

Vision Statement of the Secretary-General on Transforming Education



Transforming Education: An urgent political imperative for our collective future

First and foremost, this calls for education systems to embrace the concept of life-long learning, with more flexible pathways and financial policy incentives to allow people to re-engage with education systems several times throughout their lives. Different avenues should be made available including non-formal routes, catch-up and bridging programs, accelerated learning, and the use of digital platforms.



1

Developing Skills for
INDIVIDUALS to
Learn, work and Live



2

Developing Skills for
inclusive and
sustainable
ECONOMIES



3

Developing Skills
for Inclusive and
peaceful **SOCIETIES**

Better Skills for Better Life and Work

UNESCO Strategy for TVET

UNESCO Greening Education Partnership

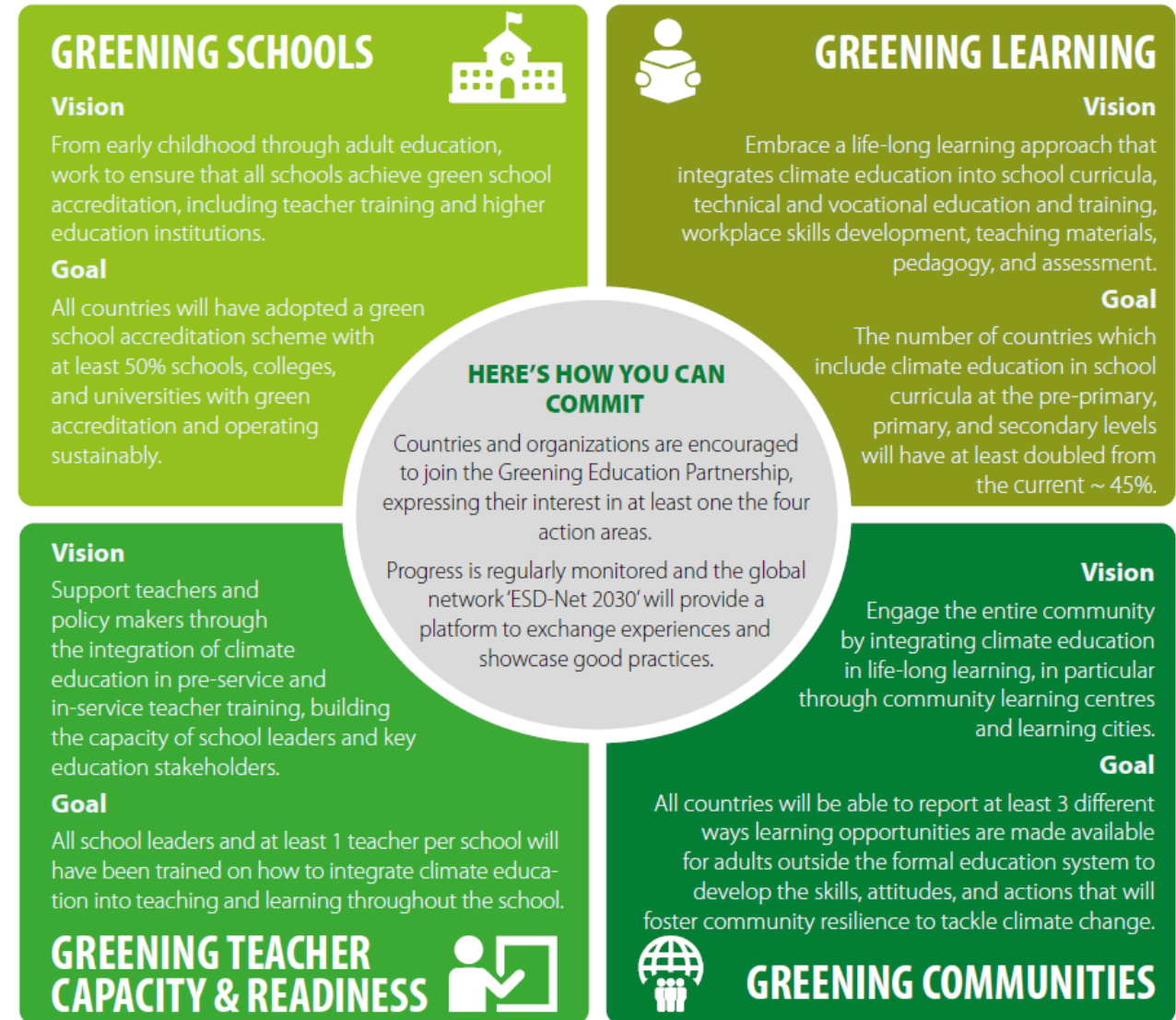
- Launched by UNESCO at UN Transforming Education Summit, New York, September 2022
- Attracted 70 Member States, 700+ organizations (as of June 2023)

Goal of the initiative:

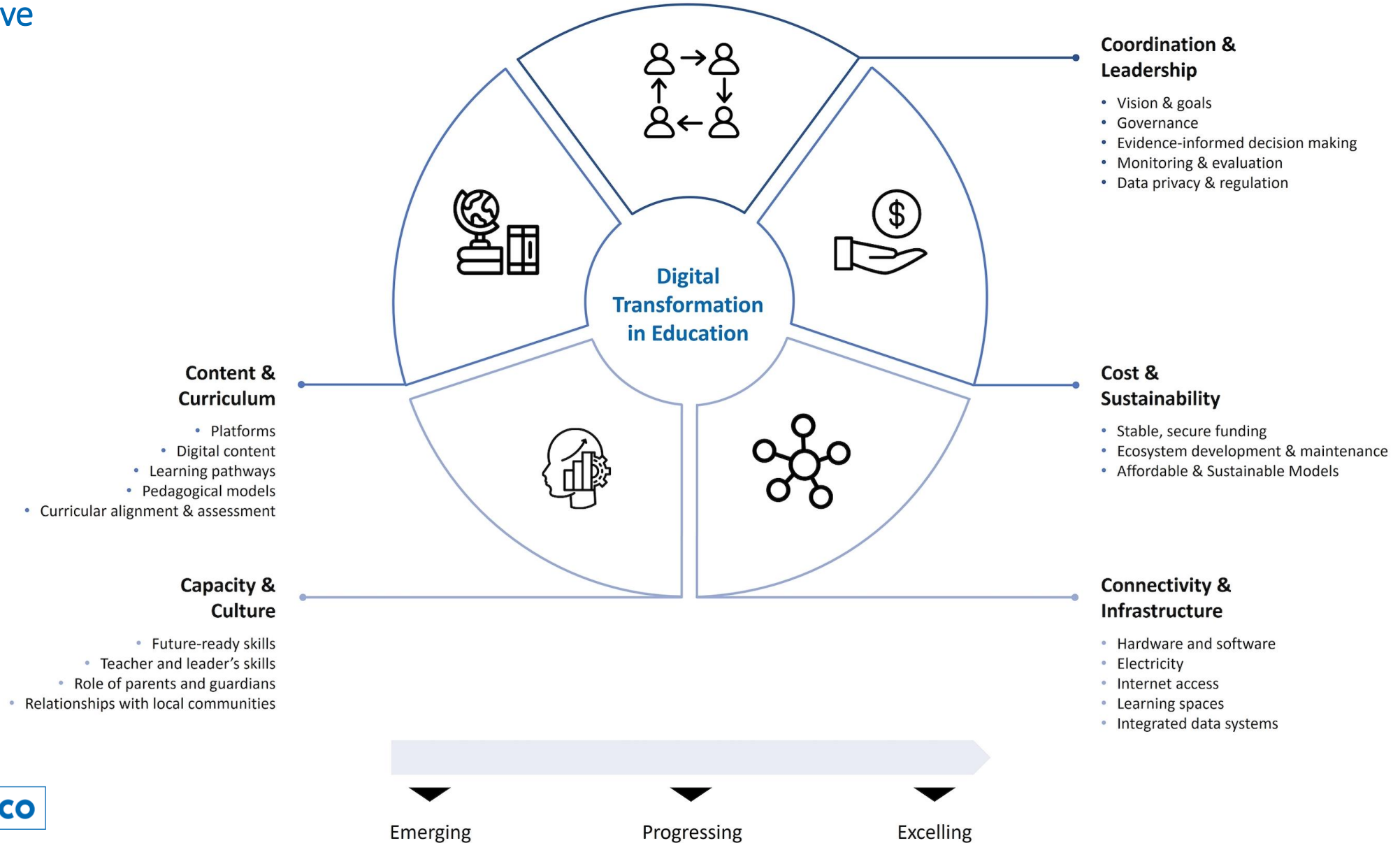
- Strong, coordinated and comprehensive global collaboration among stakeholders on climate change education

Key results:

- Co-creation of a Multi-Partner Trust Fund
- Development of a global green school quality standard
- Development of green curriculum guidance
- Development of guidelines on teacher preparedness



Source: UNESCO



Global Skills Academy framework and goals

Scaling to support **10 million learners** by 2029 to enhance their **employability and resilience** in a changing labour market.

2023

2029



1,000,000+ Learners

Strengthen Partnerships

10 million Skilled



24+ Partners from the Global Education Coalition

Demand Driven Solutions

Foundational and New GEC partnerships mobilized toward for Transforming Education



170+ TVET institutions across the world

Dissemination and Advocacy

Ministries, TVET and National Institutions



63 Countries

Resource Mobilization

Global impact



In support of
COVID-19 Global Education Coalition
Launched by UNESCO



17 PARTNERSHIPS FOR THE GOALS



4 QUALITY EDUCATION



8 DECENT WORK AND ECONOMIC GROWTH



Education
2030

UNEVOC Network: a global platform for cooperation, knowledge sharing and capacity building



BILT: Major Flagship to Advance Innovation and Reinforce International Cooperation and Solidarity



The BILT project is implemented by

with support of

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Three Ideas for the Future



Global Virtual Centre of Excellence for Innovation in TVET

- Repository of promising practices in digital skilling and upskilling/reskilling
- Professional certification and credentials
- Skills Development Opportunities
- Expertise Support to Excellence



Global Skills Tracker

- Fact sheets of labour market analysis
- Skills Taxonomy
- Occupation and Skills standards



Global Award for Innovation in TVET

- Stimulate Innovation
- Promote Innovative Practice
- Enrich the Repository of promising practices

Thank you

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