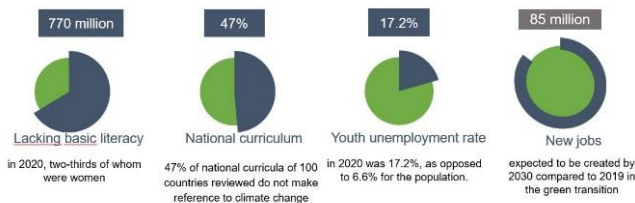# United Nations Transforming Education Summit
# Action Track 2 on Learning and skills for life, work, and sustainable development
## Discussion Paper (Final draft – 15 July 2022)
## Summary key recommendation

### Context



| 770 million | 47% | 17.2% | 85 million |
|---|---|---|---|
| Lacking basic literacy in 2020, two-thirds of whom were women | National curriculum 47% of national curricula of 100 countries reviewed do not make reference to climate change | Youth unemployment rate in 2020 was 17.2%, as opposed to 6.6% for the population. | New jobs expected to be created by 2030 compared to 2019 in the green transition |

The world today, with the multiple challenges and continuous changes, demands that education, not only reflects, but also anticipates and responds to these situations. These include, for example, the existential threat of climate change, mass loss of biodiversity, natural disasters, pandemics, extreme poverty and inequalities, rapid technological change, and violent conflicts, among others. These challenges disproportionately affect vulnerable populations, exacerbating already existing inequalities and suffering, and must be faced through foundational and lifelong learning.

### What does the transformation look like?

The ultimate purpose of education is to prepare us for life. To this end, knowledge, skills values and action for just and sustainable economies and societies are critical to achieve the SDGs and leaving no one behind.

Our approach is to focus on empowering **individuals as agents of change** to lead the twin transitions towards **digital and green economies** in the spirit of global partnership and solidarity. Advancing the SDGs in every corner of society by mainstreaming education for sustainable development at all levels and in communities based on a **whole-society approach** is critical.



Empower learners for well being, future of work, and planetary sustainability by mainstreaming education for sustainable development:

- Promoting a whole-institution approach to learning
- Ensuring inclusion, equity and justice
- Building and implementing robust lifelong learning policies and systems
- Strengthening governance and financing
- Evolving skill demands in changing economies and transition to green and digital economies

## Key recommendations and action points

Every country is called upon to:

**Empower learners for human and planetary sustainability by mainstreaming ESD:**

as a cross-cutting instrument to empower learners of diverse backgrounds and abilities at all levels of education with knowledge, skills, values and action on sustainability and to enhance awareness of SDGs at local, national, regional, and global level

✓ **Embed ESD, including climate change education, as core curriculum component at all levels of learning.** This includes non-formal, informal and adult learning through project-based learning in communities.

✓ **Launch 'ESD for 2030 country initiative'**– a ten-year umbrella initiative on mainstreaming ESD in policy and curriculum, learning environment, teacher training, youth empowerment and local action by creating synergies among key stakeholders, as implementation mechanism on ESD for 2030 Framework and its Roadmap.

✓ **Strengthen ESD networks** at local, national, regional, and global levels, including for international cooperation in developing national capacities, particularly through networks such as ESD-net 2030, UNESCO Associated Schools (ASPnet) and UNU Regional Centres of Expertise (RCE) of ESD.

**Build and implement robust lifelong learning policies and systems**

for foundational learning, skills for employment and entrepreneurship and ESD in a coherent way tthat ensures all individuals have opportunities to continue learning throughout their lives.

✓ **Ensure all learners gain foundational skills, including the ability to read with understanding, do basic maths, and master appropriate socio-emotional skills by age 10. Digital skills, transferable competencies for sustainability and entrepreneurship mindsets and skills should also be embedded in learning goals, curricula and programmes.**

✓ **Strengthen institutional capacity and provide flexibility and autonomy** to both school administrative and instructional leadership to make decision that meet the students' learning needs and local context.

✓ **Guarantee lifelong learning models** that adapt themselves to rural, ethnic, and migrant communities. This contributes to reducing education and learning gaps and allows learners from these communities to have access to programs that can further their personal and professional development.

✓ **Implement systems that recognize and validate learning and skills gained in non-formal and informal ways** to ensure all individuals have opportunities to continue learning and access decent work throughout their lives if they choose.

## Promote a whole-institution approach to learning

ensuring that teachers, administrators, learners and their families and stakeholders from the wider community are involved and are given opportunities to have their voices heard and work together in planning and delivering of learning that supports the needs of all.

✓

**Develop greening school/learning institution strategy** to become net zero by 2050 via sustainable and climate-proof infrastructure, supply chains and land use; participatory decision-making process; green teaching and learning; collaboration between school/learning institutions and communities to fully harness the richness of local wisdom and culture.

✓

**Invest in capacity building of teachers and educators and acknowledge non-formal educators and educators from other knowledge systems** such as indigenous knowledge. Education systems should take into account the knowledge of stakeholders beyond the formal educational system and be more inclusive to who we consider educators. Pre-service and in-service professional development that meets the ever-evolving learning and skills needs at all types of learning is key to quality and relevance of education.

## Ensure inclusion, equity, and justice

based on a human-rights approach to education and the principles and objectives of SDG4.

✓

**Commit to supporting gender equality at all levels of learning** and to guarantee equal access to employment for all, including women, refugees, and the most marginalized.

✓

**Recognize and support short term training and transferable certification** to ensure that the learning needs of all individuals are met, paying particular attention to those from marginalized and disadvantaged backgrounds, people with disabilities, refugees and displaced people, those living in rural or remote areas, people from linguistic minorities and the elderly.

## Address evolving skills demands in changing economies and transition towards green and digital economies

supporting the development of skills for decent work by investing in people at every stage of their life in the context of changing economies and digital and green transitions and to strengthen links between education and training systems and the labour market by expanding work-based learning and building partnerships between institutions and enterprises.

✓

**Increase investment in people to create flexible learning pathways throughout the life course** to facilitate the skilling, upskilling and reskilling of all citizens including youth, women and the elderly in the context of changing economies and societies such as green and digital transitions

✓

**Adopt innovative tools** such as individual learning accounts, lifelong learning entitlements, micro credentials, and management of individual learning portfolios to promote more flexible and responsive recognition mechanisms.

✓

**Provide entrepreneurship skills development**, including self-employment and social entrepreneurship, particularly in contexts where employment possibilities in the formal sector are limited.

## Strengthen governance and financing

to ensure that countries develop, reform, and implement learning and skills for sustainable development policies in partnership with public and private entities, including educators, youth, governments and employers' and workers' organizations.

✓

**Leverage existing networks, partnerships and global instruments and frameworks** identified in this paper to mobilize additional resources and expertise; support the design, implementation and evaluation of relevant programmes and policies; facilitate communication among stakeholders from different sectors, such as between governments and the private sector and civil society, including young people; and support initiatives that create solutions in the form of global public good.

✓

**Commit to the data collection and monitoring of progress,** including, among others, the periodic reporting on the UNESCO 1974 recommendation; the 2015 Recommendation on TVET; and the development of stronger monitoring systems for measuring progress in foundational skills.

# United Nations Transforming Education Summit

## Action Track 2 on Learning and skills for life, work, and sustainable development

**Discussion Paper (Final draft – 15 July 2022)**

## Context

Transforming education means empowering learners with the knowledge, skills, values, and attitudes to be resilient, adaptable, and prepared for an uncertain and complex future while actively and creatively contributing to human and planetary well-being and sustainable societies.

Education is a fundamental human right, and a learner-centred whole child approach for inclusion and equity should be at the core of every education system. However, it is estimated that in 2020 more than 770 million young people and adults still lacked basic literacy skills, two-thirds of whom were women. This figure includes 98 million young people aged 15-24[i], reflecting growing concern over low or inadequate literacy and numeracy skills among young learners. The COVID-19 pandemic has magnified existing disparities and inequalities – for example, the proportion of children in low- and middle-income countries who cannot read a simple text by age 10 may increase from the pre-pandemic 50% to potentially up to 70% worldwide. Vulnerable and marginalized children are particularly affected, for example children with disabilities are 42% less likely to have foundational reading and numeracy skills compared to their peers[ii].

Foundational learning[1], including literacy and numeracy, especially in mother-tongue languages and in harnessing the living heritage that learners bring to the learning process, is indispensable for lifelong learning[2] and is essential to be able to live a healthy, sustainable, and productive life in a fast-changing environment. Moreover, foundational learning should embed the ability to read and understand written words and to think scientifically and critically. Learning outcomes in foundational skills vary widely between countries and within countries. Over a third of students in low- and middle-income countries do not reach minimum proficiency in literacy and numeracy at age 15 or grade nine. Learning must reach the most marginalized groups, including, among others, refugees, stateless people, people with

---

[1] The term foundational learning in this document encompasses both basic literacy and numeracy skills, as well as transferrable skills, such as critical thinking, that are the building blocks for any further learning.
[2] The definition of lifelong learning used in this document includes learning that takes place at all age groups, in all levels of education, in all learning modalities, in all learning spheres and spaces, and for a variety of purposes.

disabilities, those living in poverty, and rural communities. It is also important to ensure that parents and families have access to adequate support to accompany their children's learning, particularly in the context of the safe use of digital technologies. In this context, adult learning and education (ALE) has a critical role to play in the development of relevant knowledge, skills, attitudes and values throughout the life course, including through online personalized learning and inter-generational learning within families and communities.

Education that lays a solid foundation for life needs to address an increasingly complex and interconnected world faced with the real existential threat of climate change, mass loss of biodiversity, natural disasters, pandemics, extreme poverty and inequalities, rapid technological change, violent ideologies and conflicts, structural discrimination and marginalization, and democratic backsliding, among others. However, we are witnessing a roll back of the achievements in education and other Sustainable Development Goals (SDGs) due to COVID-19 and other international crises. Recent UNESCO findings show that around half of the 100 countries reviewed had no climate change mentioned in their national curriculum frameworks. This lags behind the needs and aspirations of young people, 75% of whom express that they are frightened about their future as they are not prepared to face the unprecedented climate crisis. Less than 30% of teachers surveyed recently[ii] felt ready to teach about climate change in their local context; this is just one example of the lack of preparedness and frustration that exists in our education systems to address sustainability challenges. It is critical that children in vulnerable situations such as children with disabilities, migrant and refugee children, and children affected by poverty, discrimination, conflict, crises, and natural disasters, should not be left behind. These challenges and threats should all be tackled by empowering individuals in the spirit of global partnership and solidarity, as part of the growing call for education to enable individuals as agents of change.

Moreover, in the rapidly changing world of work, skills are moving targets, making it increasingly difficult to match the supply and demand for them. Unemployment and inactivity are affecting youth in particular, and the transition from education and training to work is disrupted by a lack of demand-driven and practice-oriented training, sluggish economies and changing labour markets. According to the latest ILO estimates, the youth unemployment rate in 2020 was 17.2%, as opposed to 6.6% for the total labour force. These inequalities have been further exacerbated by the effects of the COVID-19 pandemic, which disrupt learning of many youth and adults, as well as their mental, social, and financial well-being. On the other hand, 69% of employers worldwide struggle to find the skilled workers they need, highlighting the urgency of closing the widening skills mismatches[iii]. There are also new opportunities arising, such as 85 million additional jobs that are expected to be created between 2019 and 2030 in the green energy transition to achieve the 1.5-degree pathway[iv]. To enhance employability and enable an ecologically sustainable transition, young people and adults need continuous reskilling and upskilling for rapidly changing economies affected by digitization, the shift to a low-carbon economy and other mega-drivers of change in our economies and societies.

To address the complex set of challenges faced by our societies today, it is important to adopt a lifelong and life-wide approach to education and learning. This means addressing and responding to the learning needs of all individuals, regardless of their age, socio-economic or educational background, geographical context or employment status in a flexible way. Building on the momentum and commitments created around the Sustainable Development Goals (SDGs) since 2015, as well as the potential for big economic and societal transformation seen during the rapid adaptation to the pandemic, now is the time to embrace learning more fully as a key tool to develop more sustainable and just economies and societies on a healthy planet. Education for sustainable development (ESD)[3] is an integral element of the SDGs on quality education and a key enabler of all other goals. Building on the global framework for the period 2020–2030, entitled "Education for Sustainable Development: towards achieving the Sustainable Development Goals (ESD for 2030)" and the Berlin Declaration on Education for Sustainable Development, acknowledged by the UN General Assembly (Resolution 76/209), mainstreaming ESD in education, training and lifelong learning as well as society, is a crucial part of transforming them for the future. Action Track 2 under the Transforming Education Summit will address these key issues: (a) foundational learning; (b) education for sustainable development, including environmental and climate change education; and (c) skills for employment and entrepreneurship. Action Track 2 will identify successful policy interventions in these areas, compile a catalogue of good practices to inspire, and, crucially, mobilise the global education community to make concrete commitments and to take action, building where possible on existing initiatives, partnerships and coalitions.

## What does the transformation look like?
## ⇒ Mainstream education and skills for sustainable development to empower all learners for well-being, the future of work, and planetary sustainability

The question of empowering learners for human and planetary sustainability reminds us that the ultimate purpose of education is to prepare us for life – to understand how to organize our lives and how to relate with other human beings and nature. Education is about balancing *learning to be* and *learning to live together* with our current preoccupation on *learning to know* and *learning to do*. It is about learning from the past for the present and for anticipating and shaping a better future. This empowerment process implies learning lessons from history, passing on and recreating the living heritage of one's community, and building on local wisdom and knowledge, including of indigenous

---

[3] The scope of "ESD" in this document refers to that of the ESD for 2030 Roadmap (2019): "ESD empowers learners with knowledge, skills, values and attitudes to take informed decisions and make responsible actions for environmental integrity, economic viability and a just society empowering people of all genders, for present and future generations, while respecting cultural diversity." https://unesdoc.unesco.org/ark:/48223/pf0000374802

communities. As discussed in the recent UNESCO report Reimagining Our Futures Together,[v] education can embrace both knowing what and knowing how.

A system-wide approach to transforming education will be needed to develop and support capacities to innovate. To equip young people and adults with the necessary knowledge, skills, values and attitudes education will need to re-imagine and re-create more just and sustainable economies and societies in an increasingly uncertain and unpredictable world.

Foundational learning requires ensuring that all children master basic literacy and numeracy skills. To achieve this foundational learning, educational systems need to embrace diverse ways of learning, including through digital means, along with social and emotional competences that include problem solving, teamwork, empathy, and compassion and resilience building. These transferable competences are necessary to provide the foundation upon which learners may foster the joy of learning, access further education and training and employment and deepen their capacity for decent jobs and fulfilling sustainable lives. Research on brain development demonstrates how experience in early childhood education and care is crucial for foundational skills and lifelong learning. Foundational learning, including through arts and play, means learners acquire the ability to read and write, to identify, understand, and communicate clearly and effectively, and therefore to open opportunities for the future. As part of the right to education, foundational learning empowers individuals and improves their lives by expanding their capabilities to distinguish between different kinds of life and choose the one they have reason to value. This foundation can only be built if it takes into account the knowledge, values and skills that learners bring to the learning process. They are embodied in their living heritage, which has been passed on to them from one generation to the next, and of which they may or may not be conscious.

To ensure learners are equipped with the knowledge, skills, values and attitudes to take action for a sustainable, inclusive and just re-structuring of our economies and societies, as enshrined in the SDG Target 4.7 as well as the entire 2030 Agenda, it is also important to address major shortcomings regarding the extent and depth of education for sustainable development (ESD) in educational plans and curricula. In view of Member States' commitments to integrate ESD with environmental and climate action into the core curriculum at all levels of education systems by 2025[vi] under the ESD for 2030 framework, efforts must be made in the short and medium terms to ensure that curricula and pedagogies support knowledge, skills, values and action for just and sustainable economies and societies. It is a lifelong learning approach which also calls for reflection and unlearning[vii] of unsustainable ways of living and ideas about how we measure success, and empowering individuals to make structural changes by holding government and industries to account. Sustainable education and training systems start by getting every school and every teacher across the world ready for empowering learners with the knowledge, skills, values and attitudes to think critically and be actively involved in finding solutions for social, economic and environmental challenges, both locally and globally. They make learners fully aware of the importance of the SDGs through a whole-institution approach to ESD

that engages not only learning content and pedagogy but also facilities institutional culture as well as local communities including families. To advance the SDGs in every corner of society, mainstreaming ESD in education at all levels and in communities based on a whole-society approach is critical. ESD plays an important role in promoting and enhancing public awareness of the SDGs[4]. ESD is also about learning for change that helps every individual to feel a sense of belonging, while participating fully in society and economy as an active global citizen with an understanding of how society and economy works and how to influence opportunities for change towards sustainability.

The 2030 Agenda also makes calls for an integrated approach to development, recognizing the need to: eradicate poverty in all its forms and dimensions; combat inequality within and between countries; create inclusive and sustainable economies; achieve full and productive employment and decent work for all; and ensure full gender equality and social inclusion. Technical and Vocational Education and Training (TVET[5]) and skills development have a central role to play in ensuring the achievement of these goals. In particular, the twin transitions towards digital and green economies will result in job losses and uncertainty for a segment of the workforce, as well as the creation of new opportunities. Investment in people for skilling, reskilling and upskilling will be vital. Countries will need to ensure access to affordable, relevant, and quality TVET and skills development as well as the acquisition of technical, vocational, and transversal skills for employment, decent work, and entrepreneurship. At the same time, given the paramount importance of digital technologies in all areas of economic and social life, policy makers need to make specific efforts to address the digital divide, by ensuring that learners from all backgrounds and in all stages of life have the skills required to access and use new technologies. TVET and skills development are expected to address economic, social, and environmental demands by helping youth and adults develop the skills and competences they need, promoting transition towards equitable, inclusive, digital and green economies.

The International Commission on Futures of Education has called for a new social contract for education that builds common purpose and enables individuals and communities to flourish together[viii]. Education, learning, and vocational training must therefore be seen from a holistic and lifelong learning perspective that emphasizes ecological, social and emotional, intercultural, interdisciplinary and intergenerational

---

[4] A/RES/76/209

Recognizing also the role of education for sustainable development in promoting and enhancing public awareness of the eradication of poverty, of sustainable consumption and production, of combating climate change, of conserving biodiversity and ecosystems, of building disaster-resilient communities and of promoting a culture of peace and non-violence, among other things. https://digitallibrary.un.org/record/3954261?ln=en

[5] The scope of "TVET" in this document is the same as in the "UNESCO Recommendation concerning TVET" (2015): "TVET, as part of lifelong learning, can take place at secondary, post-secondary and tertiary levels and includes work-based learning and continuing training and professional development which may lead to qualifications.  TVET also includes a wide range of skills development opportunities attuned to national and local contexts.  Learning to learn, the development of literacy and numeracy skills, transversal skills and citizenship skills are integral components of TVET."

https://unesdoc.unesco.org/ark:/48223/pf0000245178

learning to foster global citizenship, rule of law, mutual trust and global solidarity. It requires strengthening a wide range of cognitive, socio-emotional, and behavioral competences needed in a rapidly changing and still largely unequal world, such as self-assessment, critical inquiry, inter-personal communication, conflict management, creativity, collaborative work, empathy, and emotional intelligence. Such an approach will ensure that all learners, from early childhood through adulthood, not only acquire relevant knowledge and skills but also are empowered and inspired to reflect and actively contribute to global peace, sustainable development, and economic, societal and cultural transformation.

## Mapping of key investments, interventions, and game changers

The key to transformation can be found in leading policy interventions and practices across the world. Below are some key action areas on how to empower learners for well-being, the future of work, and planetary sustainability by mainstreaming education for sustainable development.
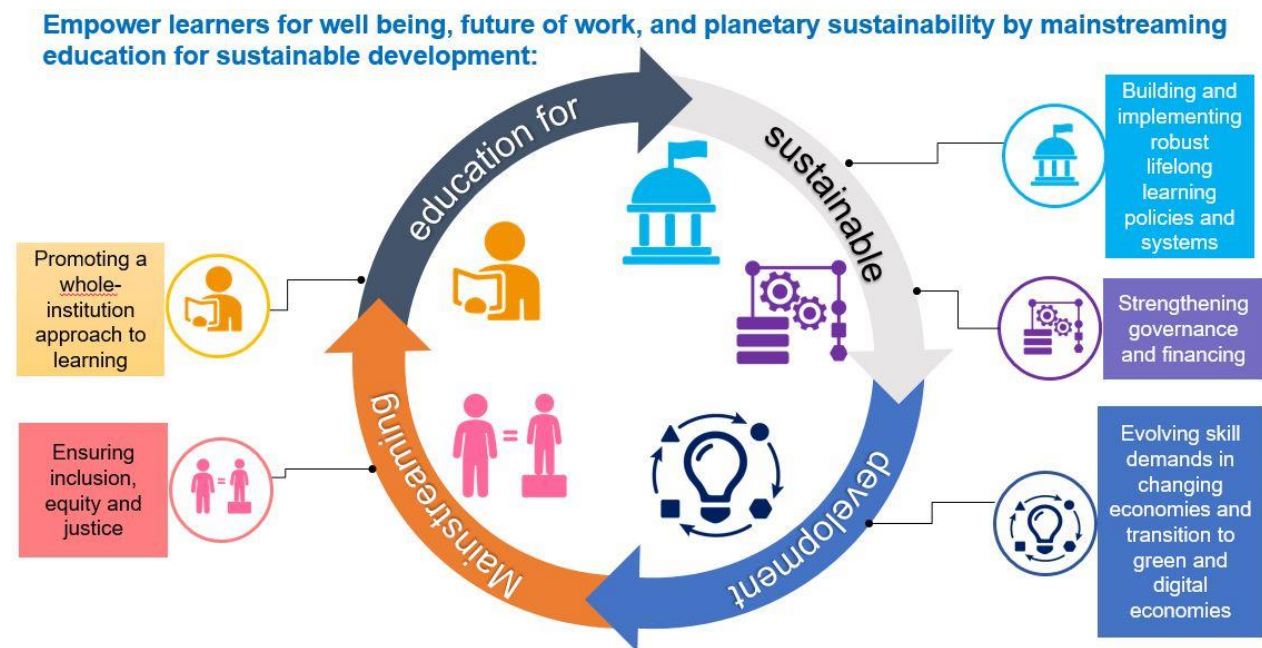


- **Empower learners for human and planetary sustainability by mainstreaming ESD**: ESD is a cross-cutting instrument to empower learners at all levels of education and society. It is important to promote a whole-institution approach and a whole-society approach to advance the SDGs in every corner of society, as well as a holistic approach to reinforce the

9

interdisciplinary linkages of the three pillars of sustainable development: economic, social, and environmental. In particular, the urgency of the climate crisis calls for strengthening of climate literacy and education across all action areas, taking into account mental health and well-being. In this regard, promotion of project-based learning that engages informal learning from and in families and local communities; development of educational resources designed by teachers and pedagogical experts; capacity building of educators and research through higher education institutions are all key.

- **Build and implement robust lifelong learning policies and systems** including investment in professional development through a whole-of-society and rights-based approach starting from the very early years of life[ix]. This will entail the design of curricula and pedagogies that foster knowledge, key competencies such as problem-solving, critical thinking and systems-thinking; empathy and kindness; core values such as justice, equity, co-existence within nature; and engagement and action as change agents for economic and societal change for sustainable development in their communities. Qualification policies should support recognition of skills, work experiences and knowledge between systems, throughout life and outside of formal education systems, including through new forms of certification such as micro-credentials. It is also crucial to strengthen the policy-research nexus and to increase investment in professional development of teachers and educators to lead and facilitate the redesigning of education systems.

- **Promote a whole-institution approach to learning**, recognizing that learners and educators become meaningfully engaged in sustainable development by learning what they live and living what they learn, in particular through a) learning content which respects collective survival and prosperity within the planetary boundaries from early childhood; b) pedagogies that are experiential, action-oriented, localized and culturally relevant; c) facilities and a culture of participation as their institutions become living laboratories for active citizenship; d) engagement with and learning through communities. Collaborative learning both with and from youth can help steer the way forward.

- **Address evolving skills demands in changing economies and transition to green and digital economies:** Identify the new skills that will be required in the economies and societies of the future, such as literacy, digital literacy and citizenship, emerging technical and STEM skills; and competences for sustainability, civic and political engagement and global citizenship; and innovation and entrepreneurship mind-sets. To this end, appropriate analysis of skills demand and the use of labour market intelligence to inform skills development planning and programmes through social dialogue, with effective participation of government, employers and workers, ensuring that sustainability remains a strong criterion for any decisions taken; relevant curricula and pedagogies; skills and capacities of educators and other stakeholders and engagement with the private sector; more flexible pathways of lifelong learning; and investment in TVET are needed to ensure quality and relevance of learning and training programmes.

- **Ensure inclusion, equity, and justice:** All learners, irrespective of their background, should be empowered with the knowledge, skills, values and attitudes required to address individual, economic and societal demands. Emphasis should be placed on removing barriers to learning for disadvantaged and vulnerable populations that are disproportionately affected by climate change, natural disasters, conflict and other planetary crises, including people living in extreme poverty, people on the move and displaced people, people with disabilities, indigenous people, minorities and people in rural areas. Particular attention should be given to ensuring gender equality in learning. Specific measures to prevent early school drop-out may be particularly effective in some contexts for learners from vulnerable backgrounds. In addition, disadvantaged and/or vulnerable people often have the least resources and access to information that will enable them to adapt to the impact of climate change. Technology can also be more creatively used to respond to diverse learning needs.

- **Strengthen governance and financing**: Transforming education requires new ways of organizing system governance: it should not be the exclusive domain of governmental bodies. Firstly, education leadership should move from centralized top-down control and management to reflexive governance and network steering involving collaboration among a range of relevant actors. New forms of inter-sectoral and public-private partnerships can foster quality and relevance of education. The private sector has a particularly important role to play, both as a provider of learning at the workplace and as a partner in the design and planning of training programmes.  Dialogue between, and shared ownership by, the world of education and the world of work, could unlock additional investment in learning and skills development to drive economic and societal transformation towards more just, inclusive, and carbon-neutral green economies. Moreover, it requires strengthening autonomy, flexibility, leadership and planning at school level and the training of school leaders for improved school management and resilience. Equity-based, pro-poor budget allocations should be established so that education expenditures serve to reduce inequities and are efficiently linked with strengthened social protection schemes for learners. The mobilization of political will, increased funding, and agile policy must be rooted in a global system committed to enabling every community to chart its own path to transformation, on its own terms, in its own time and in line with its own aspirations.

## Synergies and alignment across Action Tracks and their sub-themes

Transformation of education systems requires a whole-systems approach. Therefore, synergies and alignment across key areas of focus, including emphasis on gender mainstreaming as well as readiness in situations of emergency and crisis, need to be part of the strategy.

- **Inclusive, equitable, safe, and healthy schools**: Learners, especially marginalized children, are more likely to drop out of school early, without strong foundational skills, and thus do not have the opportunity to access the long-term health, economic, and social benefits of a quality and

inclusive education. ESD contributes to healthy schools by promoting the interlinkages between the health of the planet and people around issues such as climate change and sustainable energy use for schools, pollution, locally grown food, and social and emotional well-being, as well as comprehensive sexuality education, which is a precondition for the empowerment of young people. TVET curricula, training content and pedagogies should also be renewed to foster gender transformative, problem solving-based education, collaboration and civic competencies, scientific literacy, media and information literacy, and digital citizenship.

- **Teachers, teaching, and the teaching profession**: At the heart of quality education, teachers are at the forefront of ensuring learners' success. Teachers, including those that work in non-formal education or in other knowledge systems such as indigenous knowledge, must be valued as professionals and their professional autonomy guaranteed with adequate support for their well-being[x]. Educators remain key actors in facilitating learners' transition to sustainable ways of work and life. To guide and empower learners, educators themselves need to be empowered and equipped as facilitators of learning, for example in the use of innovative, learner-centred pedagogies and the inclusion of ESD in initial teacher training courses and professional development opportunities, with engagement of higher education institutions. Educators also need a supportive environment in order to thrive. This includes the support of key stakeholders and decision-makers including principles and other members of education leadership teams. In addition, teaching, particularly in TVET, should be further capacitated and professionalized, noting the changed roles and responsibilities due to the digitalization of learning. TVET teacher training institutions need support to plan, organize, deliver, and evaluate pre-service and in-service teacher training and professional development within a lifelong learning perspective. It is important to consider that TVET teachers and trainers are dual professionals, and as such their professional development should also include opportunities for keeping their technical skills up to date.

- **Digital learning and transformation:** During the pandemic, the rapid shift to distance learning highlighted the pre-existing inequalities, especially the persistent digital divide in terms of connectivity, infrastructure, and the ability to engage with technology, while also identifying resilient and innovative digitally and remotely supported education, which inspire further explorations. Digitalization is reshaping jobs on a massive scale, in ways that are particularly difficult to predict. Developing robust lifelong learning competences, including digital skills and critical thinking in the face of possible 'technology-solves-all illusions', will therefore become a necessity for all young people and adults to enable them to respond and adapt to these changes. It is also important to foster sustainable infrastructure and internet connectivity in schools by using innovative and sustainable technologies and materials.

- **Financing of education:** Financing quality education on foundational learning, ESD and skills development, is a structural and persistent issue. Despite the immense needs, for years these areas have been a low priority in international aid and domestic funding. Sustained and diverse sources of funding often remain very limited. Building on the Paris Declaration of the 2021

Global Education Meeting to support and advocate for efficient and equitable financing for quality education, investment is crucial in high quality, relevant youth and adult literacy training; in 'ESD for 2030 country initiatives' to mainstream ESD in their education policies and curricula; and in TVET and skills development, particularly financing lifelong learning entitlements and new forms of public-private partnerships and outcomes-based contracting. For example, industrial sectors designed for the protection of the environment have been attracting a lot of investments and therefore require people with appropriate knowledge and skills. This will provide an opportunity to introduce private funding into relevant education institutions.

- **Equity and gender mainstreaming**: In many contexts, large segments of the population have had historically limited access to education, training and skills development opportunities, for example women and girls, people belonging to disadvantaged social groups, people living in remote rural areas, marginalized communities or urban slums, people with disabilities, migrants, refugees or internally displaced people, lower-skilled workers, and workers in the informal economy. Furthermore, the consequences of environmental destruction tend to be disproportionately felt by the most vulnerable, often amplifying the existing social inequality and injustice. In particular, women and girls are more vulnerable to the effects of climate change and other types of emergencies, as pre-existing gender-roles and expectations limit their coping capacity, access to resources and decision-making processes, as well as their mobility. A gender transformative approach is key to ensuring that women and girls have an important role as the drivers of sustainable societal re-designing[xi]; likewise, education and training measures will play a key role in addressing disparities.

- **Education in situations of emergency and crisis**: Education can help disadvantaged and vulnerable populations, including children and youth, contribute to building a better future and equipping them with knowledge, skills, attitudes and values for conflict mitigation and resolution. ESD includes education for disaster risk reduction, to prepare for potential natural disasters and climate-induced displacement. Global citizenship education, TVET and skills development can also play a part in alleviating concerns such as political disengagement, social unrest, prejudice, and discrimination and violent extremism, including in the skilling, reskilling and upskilling of migrants, refugees, and displaced people. International cooperation is encouraged to enhance national capacities for conducting emergency drills at schools and drafting guides for disaster risk reduction.

## Recommendations

**Empower learners for human and planetary sustainability by mainstreaming ESD:** as a cross-cutting instrument to empower learners of diverse backgrounds and abilities at all levels of education with knowledge, skills, values and action on sustainability and to enhance awareness of SDGs at local, national, regional, and global level.

*Every country is called upon to:*
Recommendation 1.
- **Embed ESD, including climate change education, as core curriculum component at all levels of learning**. This includes non-formal, informal and adult learning through project-based learning in communities.

Recommendation 2.
- **Launch 'ESD for 2030 country initiative'**[xii] – a ten-year umbrella initiative on mainstreaming ESD in policy and curriculum, learning environment, teacher training, youth empowerment and local action by creating synergies among key stakeholders, as implementation mechanism on the ESD for 2030 Framework and its Roadmap.

Recommendation 3.
- **Create and strengthen ESD networks at local, national, regional, and global levels**, including for international cooperation in developing national capacities, particularly through networks such as ESD-net 2030, UNESCO Associated Schools (ASPnet) and UNU Regional Centres of Expertise (RCE) of ESD.

**Build and implement robust lifelong learning policies and systems** for foundational learning, skills for employment and entrepreneurship and ESD in a coherent way that ensures all individuals have opportunities to continue learning throughout their lives.

*Every country is called upon to:*
Recommendation 4.

- **Ensure all learners gain foundational skills**, including the ability to read with understanding, do basic maths, and master appropriate socio-emotional skills by age 10. Digital skills, transferable competencies for sustainability and entrepreneurship mindsets and skills should also be embedded in learning goals, curricula and programmes.

Recommendation 5.

- **Strengthen institutional capacity and provide flexibility and autonomy** to both school administrative and instructional leadership to make decisions that meet the students' learning needs and local context.

Recommendation 6.

- **Guarantee lifelong learning models** that adapt themselves to rural, ethnic, and migrant communities. This contributes to reducing education and learning gaps and allows learners from these communities to have access to programs that can further their personal and professional development.

Recommendation 7.

- **Implement systems that recognize and validate learning and skills gained in non-formal and informal ways** to ensure all individuals have opportunities to continue learning and access decent work throughout their lives.

---

**Promote a whole-institution approach to learning,** ensuring that teachers, administrators, learners and their families, employers and stakeholders from the wider community are involved and are given opportunities to have their voices heard and work together in planning and delivering of learning  that supports the needs of all.

---

*Every country is called upon to:*
Recommendation 8.

- **Develop greening a school/learning institution strategy** to become net zero by 2050 via sustainable and climate-proof infrastructure, supply chains and land use; participatory decision-making process; green teaching and learning; collaboration between schools/learning institutions and communities to fully harness the richness of local wisdom and culture.

Recommendation 9.

- **Invest in capacity building of teachers and educators** and **value non-formal educators and educators from other knowledge systems** such as indigenous knowledge. Education systems should take into account the knowledge of stakeholders beyond the formal educational system and be more inclusive to who we consider educators.  Pre-service and in-service professional development that meets the ever-evolving learning and skills needs in all types of learning is key to quality and relevance of education.

> **Address evolving skills demands in changing economies and transition towards green and digital economies,** supporting the development of skills for decent work by investing in people at every stage of their life in the context of changing economies and digital and green transitions and to strengthen links between education and training systems and the labour market by expanding work-based learning and building partnerships between institutions and enterprises.

*Every country is called upon to:*

Recommendation 10.

- **Increase investment in people to create flexible learning pathways throughout the life course** to facilitate the skilling, upskilling and reskilling of all citizens including youth, women and the elderly in the context of changing economies and societies such as green and digital transitions[xiii].

Recommendation 11.

**Adopt innovative tools** such as individual learning accounts, lifelong learning entitlements, micro credentials, and management of individual learning portfolios to promote more flexible and responsive recognition mechanisms.

Recommendation 12.

- **Provide entrepreneurship skills development**, including self-employment and social entrepreneurship, particularly in contexts where decent work opportunities in the formal sector are limited.

> **Ensure inclusion, equity, and justice** based on a human-rights approach to education and the principles and objectives of SDG4.

*Every country is called upon to:*

Recommendation 13.

- **Commit to supporting gender equality at all levels of learning** and to guarantee equal access to employment and decent work for all, including women, refugees, and the most marginalized.

Recommendation 14.

- **Recognize and support short term training and transferable certification** to ensure that the learning needs of all individuals are met and opportunities for decent work are enhanced, paying particular attention to those from marginalized and disadvantaged backgrounds, people with disabilities, refugees and displaced people, those living in rural or remote areas, people from linguistic minorities and the elderly.

> **Strengthen governance and financing** to ensure that countries develop, reform, and implement learning and skills for sustainable development policies in partnership with public and private entities, including educators, youth, governments and employers' and workers' organizations.

*Every country is called upon to:*

Recommendation 15.

- **Leverage existing networks, partnerships and global instruments and frameworks** identified in this paper to mobilize additional resources and expertise; support the design, implementation and evaluation of relevant programmes and policies; facilitate communication among stakeholders from different sectors, such as between governments and the private sector and civil society, including young people; and support initiatives that create solutions in the form of global public good.

Recommendation 16.

**Commit to the data collection and monitoring of progress**, including, among others, the periodic reporting on the UNESCO 1974 recommendation[xiv]; the 2015 Recommendation on TVET; and the development of stronger monitoring systems for measuring progress in foundational skills.

## Examples of successful policy interventions and good practices across different regions

**Empower learners for human and planetary sustainability by mainstreaming ESD**

- In Japan, ESD principles and perspectives are at the heart of National Curriculum Standards for all levels of education from pre-school to upper secondary[xv].
- An example of learning for change can be found in Our Futures Forward Academy, Gibraltar[xvi], which supports young people who are working in a diverse set of professions to understand, experience and drive change for a sustainable future in their workplace or professional community.
- In 2020, Italy became the first country to introduce compulsory education on climate change and sustainable development in primary and secondary education through the Civic Education Discipline, based on inter-ministerial collaboration on the Italian strategy for Education for Sustainable Development and the "School ReGeneration Plan"[xvii].
- The Ministry of Education and Technical Education (MoETE) in Egypt is implementing Egypt 2.0, a full-scale transformation towards a competence-based learning and an expansion of digital learning from all children and adolescents.


**Build and implement robust lifelong learning policies and systems**

- The Skill Council for Green Jobs[xviii] in India is a recently launched initiative of the Government of India led by the Ministry of New and Renewable Energy (MNRE) and the Confederation of Indian Industry (CII). It aims to identify the skilling needs in the Green Businesses sector, and implement nation-wide, industry-led, collaborative skills development and entrepreneur development initiatives that will enable India to meet its potential for Green Businesses.
- The Unlock Literacy Project[xix] of World Vision Ghana, winner of the UNESCO-Japan prize on ESD[xx], goes beyond traditional literacy approaches to empower children to think critically about local issues and take actions, involving whole-communities.
- Academic credit bank[xxi] and personal learning accounts[xxii](Compte personnel de formation)[xxiii] in the Republic of Korea and France are examples of successful initiatives in implementing lifelong learning entitlements for all.

**Promote a whole-institution approach to learning**

- As part of efforts by the International Islamic University Malaysia to establish a whole-institution framework to support holistic education for sustainable development, all students, lecturers and administrators are required to engage in three compulsory courses, putting sustainable development into action through community engagement, based on an inter- and trans-disciplinary approach[xxiv].

- Good practices of the whole institution approach to ESD can be found in UNESCO Associated Schools (ASPnet) across the world. For example, the whole institution approach to climate education project engaged in 258 ASPnet schools in 25 countries[xxv]. In Japan ASPnet schools are strategic hubs for implementing ESD and the number of participating schools increased from 16 in 2005 to more than 1,000 in 2022[xxvi].
- The Family Literacy Programme in Namibia[xxvii] offers a platform for consolidating and reinforcing classroom lessons with lessons at home, involving teachers, administrators, children and parents.

**Address evolving skills demands in changing economies and transition to green and digital economies**

- SkillsFuture, Singapore[xxviii] is a national movement under the Ministry of Education to provide Singaporeans with the opportunities to develop their fullest potential throughout life, regardless of their starting points.  It has identified three priority growth areas of digital, green and care economies for the country and supports learners to acquire relevant skills.
- Efforts towards the integration of micro-credentials into national qualification frameworks and systems in countries such as: New Zealand[xxix], Australia[xxx] or Malaysia[xxxi].
- Systems of Recognition of Prior Learning (RPL) examples from several countries and regions, such as Sri Lanka[xxxii]  or Quebec, Canada.
- In Finland[xxxiii], the number of individual qualifications was cut in half in 2018 from the previous 300 to allow for qualifications that are broader in scope, taking into account the importance of broad competencies and project-based learning and the unpredictability of what vocations would be relevant in the future.
- BeChangeMaker programme[xxxiv] by World Skills and the HP Foundation is an example of youth empowerment for social good through a free social entrepreneurship training and mentoring programme.
- Alternative Learning Pathways Programme [xxxv]of UNICEF, ILO, BRAC, and the Government of Bangladesh provides vulnerable out-of-school adolescents with six-months of nationally certified on-the-job, theoretical and soft skills training, as well as job placements through informal apprenticeships. Over half of the participants are female and at least 10 per cent are adolescents with disabilities. More than 95 per cent of learners have graduated and transitioned into paid employment.

**Ensure inclusion, equity, and justice**

- In Afghanistan, the School for street-working children' project[xxxvi] offers vulnerable, street working children forced to work due to poverty, opportunities for inclusive foundational education. The project includes "skill learning classes" for girls, as current schools are no longer accessible to girls aged 12 and above.

- Return to Learning (RtL)[xxxvii] is an education programme designed for use in the first phase of humanitarian responses or in protracted crises to improve school readiness before out-of-school children transition into longer-term education opportunities (non-formal or formal) developed by Save the Children and implemented in Colombia, Lebanon, and Pakistan.
- In Argentina, the Technology-based rural secondary schools (TBRSS)[xxxviii] is an innovative approach to access education through a blend of remote teaching and on-site teaching assistance in isolated areas. Students report to classrooms in their own community and engage remotely with teachers who are stationed at an urban headquarters school. Students may also receive support from a trained tutor and an indigenous teaching assistant. Students connect with teachers and tutors by electronic notebook, and teachers visit the communities to meet students and their families at least twice a year.

**Strengthen governance and financing**

- The German National Action Plan on ESD[xxxix] and the ESD National Platform[xl] which engages multiple ministries and stakeholders, coupled with an award scheme[xli], form strong governance and policy efforts on ESD.
- The Framework for Global Education Transformation[xxxix] launched by Dubai Cares, a UAE-based global philanthropic organization, is a comprehensive and action-oriented guiding framework for a future-focused and human-centric education ecosystem that aims to serve as a catalysing framework to support nations as they chart their way towards the transformation of education.
- The ILO's Global Programme of Skills and Lifelong Learning (GPSL3) delivers technical assistance to governments, employers' and workers' organizations and training institutions to strengthen national skills development policies and systems, through strategic partnerships, in 61 target countries, raising the capacity of more than 100,000 direct recipients and reaching one million direct beneficiaries.

# Key initiatives, coalitions, networks and platforms

Below are some of the key initiatives, coalitions, networks and platforms that promote learning and skills for life, work, and sustainable development:

- The Global Alliance for Literacy, alliance of 29 countries with low adult literacy rate, including the nine countries with the largest populations worldwide strongly committed to improving youth and adult literacy rates by engaging multiple stakeholders in a coordinated way.
- The Global Skills Academy (GSA), was launched by UNESCO in July 2020 under the umbrella of the Global Education Coalition with the aim to help young people and adults build skills for employability and resilience. The GSA offers free online training to respond to the growing consequences of COVID-19 on skills development and youth employment around the world with a priority focus on boosting digital competencies among youth in the least developed countries.

- The UNEVOC Network, UNESCO's global network for institutions specialized in technical and vocational education and training (TVET) provides an environment for exchange, cooperation and mutual assistance for its member UNEVOC Centres.
- The Learning Data Compact : a coordinated effort among UNESCO, UNICEF, the World Bank other partners to provide support to all countries which lack assessment data. Learn more at Learning Data Compact.
- The FLN Hub : An online clearinghouse of resources to help build foundational literacy and numeracy skills for all children around the world. Easily accessible tools, research evidence, training materials, and implementation guides in mutiple languages.
- The UNESCO Global Network of Learning Cities is an international policy-oriented network that supports and improves the practice of lifelong learning in the world's cities by promoting policy dialogue and peer learning among member cities; forging links; fostering partnerships; providing capacity development; and developing instruments to encourage and recognize progress made in building learning cities.
- The UNESCO Associated Schools Network (ASPnet) is a global network of 12,000 educational institutions in 182 countries, which provide pre-primary, primary, secondary, technical and vocational education, or teacher education and training; committed to promoting and transmitting UNESCO´s values of peace, intercultural dialogue and understanding, sustainable development through education.
- The ESD-net 2030 is a new Global Network that aims to implement the ESD for 2030 framework and its roadmap by providing a platform of exchange and collaboration between all the education stakeholders through knowledge sharing and mutual learning; advocacy; collaboration; monitoring and evaluation activities.
- The Higher Education and Research for Sustainable Development (HESD) is a network of about 80 universities engaged with the 17 SDGs from all 5 continents in clusters. As a strategic thematic priority for the International Association of Universities, it promotes a whole institution approach to sustainable development, which fosters the incorporation of sustainable development concepts and principles in all dimensions of universities – teaching & learning, research, community engagement and campus initiatives.
- The One UN Climate Change Learning Partnership, also known as UN CC:Learn, is a collaborative initiative of 36 multilateral organizations working together to help countries build the knowledge and skills they need to take action on climate change.
- The Regional Centres of Expertise on ESD consists of over 170 RCE members across the world. RCEs are a great example of local ESD providers who are committed to translating the global agenda and SDGs into tangible local actions.
- The Empower Makers Global Impact Challenge initiative of Stanley Black & Decker commits to invest USD 25 million train more than 3 million skilled workers around the world in the next 5 years with the aim of closing the skills gap at  all levels.
- The Inter-Agency Group onTVET was established by UNESCO in 2008 to promote knowledge-sharing and a common understanding of key matters on TVET and to ensure effective

coordination of activities by international organizations involved in policy advice, programmes and research.

- The ILO's Inter-American Centre for Knowledge Development in Vocational Training (Cinterfor) works with a network of 69 national TVET institutes in the Latin America and the Caribbean (LAC) region, Spain, Portugal and Cabo Verde. ILO/Cinterfor develops skills to increase the employability of workers, the competitiveness of enterprises and countries' capacity to promote growth.  The UNITWIN/UNESCO Chairs Programme involves  over  850  institutions  in  117 countries, that serve as think-tanks and bridge builders between academia, civil society, local communities, research and policy-making to address pressing challenges and contribute to the development of their societies.
- The G20 platform, a strategic multilateral platform connecting the world's major developed and emerging economies. The Education Working Group examines the factors involved in facilitating or hindering the right to education and the achievement of higher education, also in the context of the pandemic.
- The UN Joint facility on digital capacity development established by the ITU and UNDP as the point of contact and exchange between the two agencies – bringing together expertise in areas such as digital literacy and skills training, digital needs assessment, and programmatic support – in order to improve the accessibility of digital opportunities.
- UN SDG Learn, a United Nations initiative involving multilateral organizations and sustainable development partners from universities, civil society, academia and the private sector, that aims to bring relevant and curated learning solutions on sustainable development topics to individuals and organizations.
- The Middle East and North Africa Life Skills and Citizenship Education Initiative  kicked off in 2015 with the aim of supporting the countries of the region – conceptually, programmatically and technically – to improve learning and to better invest such learning in individual, social and economic development.
- The Dutch funded PROSPECTS Partnership brings together UNICEF, ILO, UNHCR, the World Bank, and IFC to transform the way governments and other stakeholders respond to forced displacement crises through three thematic areas (jobs/social protection, education and learning, and protection and legal status) in 8 countries: Egypt, Iraq, Jordan, Lebanon, Sudan, Ethiopia, Kenya, Uganda.

i UIS, data extracted on 25 April 2022  http://data.uis.unesco.org/index.aspx?queryid=3839

ii https://unesdoc.unesco.org/ark:/48223/pf0000379914

iii Source: Manpower Group, The Talent Shortage, 2021. https://go.manpowergroup.com/talent-shortage

iv https://www.irena.org/publications/2022/Mar/World-Energy-Transitions-Outlook-2022

v https://en.unesco.org/futuresofeducation/

vi UNESCO General Conference Resolution 41th session on ESD (41GC/Resolution 15): https://unesdoc.unesco.org/ark:/48223/pf0000380399

vii https://unesdoc.unesco.org/ark:/48223/pf0000379707.locale=en

viii https://en.unesco.org/futuresofeducation/

ix For example, https://www.hrw.org/news/2022/06/06/call-expand-international-right-education

x Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students and schools. Education Policy Analysis Archives, 27(36). http://dx.doi.org/10.14507/epaa.27.3699

xi https://www.un.org/womenwatch/feature/climate_change/factsheet.html

xii https://www.unesco.org/en/education/sustainable-development

xiii https://www.unep.org/explore-topics/education-environment/what-we-do/green-jobs-youth

xiv UNESCO 1974 recommendation concerning Education for International Understanding, Co-operation and Peace and Education relating to Human Rights and Fundamental Freedoms

xv https://www.mext.go.jp/en/content/20211208-mxt_koktou01-1373244_1.pdf        https://www.mext.go.jp/content/20210528-mxt_koktou01-100014715_1.pdf

xvi https://www.futuregenerations.gi/news/futures-forward-academy-30

xvii https://www.istruzione.it/ri-generazione-scuola/index.html

xviii https://sscgj.in/

xix https://www.worldvision.de/sites/worldvision.de/files/pdf/WVD_Unlock_Literacy_Project.pdf

xx https://en.unesco.org/prize-esd

xxi https://www.cb.or.kr/creditbank/info/nInfo7_1.do

xxii https://www.all.go.kr/center/common/main/mainForCenter.do

xxiii https://www.moncompteformation.gouv.fr/espace-prive/html/

xxiv https://centre.iium.edu.my/sejahtera/?page_id=93

xxv https://aspnet.unesco.org/en-us/climate-education-education

xxvi https://www.mext.go.jp/content/20220406-mxt_koktou01-000021810_1.pdf

xxvii https://repository.unam.edu.na/bitstream/handle/11070/2906/emvula_2020.pdf?sequence=1&isAllowed=y

xxviii https://www.skillsfuture.gov.sg/skillsreport#howdoesitbenefitme

xxix https://www.nzqa.govt.nz/providers-partners/approval-accreditation-and-registration/micro-credentials/

xxx https://www.dese.gov.au/national-microcredentials-framework

xxxi https://www2.mqa.gov.my/QAD/garispanduan/Guideline%20on%20Micro-credential%2010%20Mei.pdf

xxxii https://www.ilo.org/colombo/whatwedo/events/WCMS_632908/lang--en/index.htm

xxxiii https://nvl.org/content/the-big-vet-reform-in-finland

xxxiv https://worldskills.org/what/projects/bechangemaker/bechangemaker-2022/apply/

xxxv https://blogs.unicef.org/evidence-for-action/promising-futures-vocational-training-programme-in-rural-bangladesh/

xxxvi www.actfordev.org

xxxvii https://resourcecentre.savethechildren.net/pdf/2480.pdf/

xxxviii https://www.unicef.org/argentina/que-hace-unicef/educaci%C3%B3n/escuelas-secundarias-rurales-mediadas-por-tic

xxxix https://www.bne-portal.de/bne/en/german-national-action-plan/german-national-action-plan-on-esd-adopted/german-national-action-plan-on-esd-adopted_node.html

xl https://www.bne-portal.de/bne/en/german-national-action-plan/gap-implementation-structures-in-germany/gap-implementation-structures-in-germany.html

xli https://www.bne-portal.de/bne/en/esd-awards/esd-awards_node.html