

United Nations Educational, Scientific and Cultural Organization

Embracing a culture of lifelong learning

Contribution to the Futures of Education initiative

Report | A transdisciplinary expert consultation





The illiterate of the 21st century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn.

Alvin Toffler

Dear world leaders, dear brothers and sisters. Education is not a privilege. Education is a right. Education is peace.

Malala Yousafzai

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Foreword

David Atchoarena

For half a century, inspired by the seminal work of UNESCO, the international education community has recognized the transformative power of education and the value of learning throughout life for individuals, communities and societies. For decades, policy-makers have been striving to place lifelong learning at the heart of their education agenda.

Today, making lifelong learning a reality remains an aspiration. Many countries are still struggling to meet basic education needs. Millions of people, some of them in the richest economies, face financial and other barriers that exclude them from learning and prevent them from fulfilling their potential.

We are emerging from a period characterized by an excessive focus on the vocational and skills dimensions of lifelong learning. Recognizing the complexity and multi-dimensional nature of the challenges faced by humanity calls for the restoration of a holistic vision of learning throughout life. As we anticipate further disruptions caused by the effects of climate change, demographic shifts and the substantial transformation in the labour market due to the fourth industrial revolution, lifelong learning will have to be moved further up the policy agenda, beyond the fields of education and labour market policies.

At the time of writing this report, the COVID-19 pandemic has caused major disruption in education systems and in people's lives. While acknowledging that the impact of COVID-19 on communities has been severe, we also recognize an opportunity to rethink how learning can better contribute to creating more sustainable and inclusive societies in which people are able to engage as active and global citizens.

The expert consultation that provided the basis for this report was conducted by the UNESCO Institute for Lifelong Learning (UIL). It reviewed existing barriers and explored how to boost participation and make provision fairer and more open and participatory. This report also contributes more broadly within the framework of UNESCO's 2019 Futures of Education initiative to rethink education, knowledge production and learning from a future-oriented perspective.

Finding solutions to 'grand challenges' requires collaboration across disciplines. UIL therefore opted for a transdisciplinary approach to examine lifelong learning in all its dimensions and in relation to sustainable development issues. Twelve experts took part in the exercise, including five women and seven men from Africa, the Arab States region, Asia and the Pacific, Europe, North America, and Latin America and the Caribbean. They produced a rich collection of innovative ideas and specific recommendations for action. It has been a real privilege to work with such a committed and experienced group, motivated by the belief that building sustainable and inclusive societies requires that everyone – regardless of gender, age, background or circumstance – can access the learning that best fits their needs and those of their community.

The vision of the future shaped by the group provides an understanding of what a lifelong learning society would look like, including the overarching values and principles, as well as the key implementing mechanisms required to sustain such a scenario. After setting out this vision, the report outlines the main features of the policy environment needed to make lifelong learning the concept governing education policies and to offer people real opportunities to learn throughout life. The final chapter includes a set of key messages, each complemented by specific action points. Further details on selected policy measures are offered in *Annex 1*.

I truly hope that the important work started during this transdisciplinary consultation will inform the reflections of the UNESCO-established International Commission on the Futures of Education and that the ideas and measures proposed will inspire action in policy-making, research, teaching and learning practices in Member States, and help them to embrace a culture of lifelong learning.

David Atchoarena is Director of the UNESCO Institute for Lifelong Learning

Acknowlegdements

This report is the product of a highly collaborative working and learning process that took place during a transdisciplinary online consultation on the 'Futures of Education: A lifelong learning contribution'. It builds on the engagement of international experts who discussed the potential of lifelong learning not only to transform the field of education, but also to create a more sustainable, healthy and inclusive future.

We would like to express our special gratitude to Daniel Baril, S.H. Annabel Chen, Julieta Fierro Gossman, Walter Leal, Precious Lunga, Tonic Maruatona, Eduardo Mendieta, Sunny Xinchun Niu, Jim Ogg, Neil Selwyn, Abla Sibai and François Taddei, without whom this publication would not have been possible. Special thanks go to Nele Fischer for her advice and support in crafting the methodology for the consultation and in facilitating the discussion and processing its outcomes.

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Summary of recommendations

This report presents a future-focused vision of education, which demands a major shift towards a culture of lifelong learning by 2050. It argues that the challenges humanity faces, those resulting from the climate crisis and from technological and demographic change, not to mention those posed by the COVID-19 pandemic and the inequalities it has exacerbated, call for societies that understand themselves as learning societies and people who identify themselves as learners throughout their lives.

Realizing this vision requires a learner-centric, demand-led approach to education that enables learners of all ages and backgrounds to codesign actively and use any learning process and its outcomes to achieve their full potential. Accordingly, learning to learn and managing one's own learning journey must become basic competences.

At the same time, learning must be a collective process that acknowledges the value of peer and intergenerational learning. This social dimension emphasizes learning to care for each other, for different communities and for the planet. Learning opportunities should be available for all and be designed for and with the most excluded populations to ensure inclusivity.

A collectively built global learning ecosystem should fluidly integrate formal, non-formal and informal learning, as well as diverse learning modalities, both online and offline. Such an ecosystem allows for planned or spontaneous, individual or collective learning in all spheres, throughout and across the life course. It builds on the free availability of educational resources – an 'educational commons' – and open technology, while strengthening learning opportunities through transformed educational institutions, reinvented (public) spaces for learning and revitalized workplace learning. Legal foundations and mechanisms – acknowledging lifelong learning as a human right – must ensure the recognition, validation and accreditation of learning outcomes acquired in different contexts, democratizing the negotiation of individual and social learning demand.

This vision can be realized only through an enabling environment. Securing basic needs and a strong social fabric are key to fostering lifelong learning and bridging educational gaps. It is necessary to understand learning as an innate human capability that needs to be nurtured throughout life, including in old age. Promoting learning among older people requires a pedagogical approach that acknowledges their role in society and contributes to a more positive representation of ageing. This implies seeing education as more than an economic transaction and acknowledging its public and private value. To this end, it is particularly important to build on the achievements and potential of the open source movement and to leverage the power of technology in the interests of all learners, including socially disadvantaged groups.

All of these elements form part of the 2050 vision for lifelong learning presented in this paper and require adequate funding and resource mobilization, as well as targeted policies and programmes emphasizing a demand-led perspective.

Key messages and actions points are:

- 1. Recognize the holistic character of lifelong learning (medium to long-term)
- Diversify learning provision
- Develop a lifelong learner competency framework
- Integrate recognition, validation and accreditation (RVA) mechanisms
- 2. Promote transdisciplinary research and intersectoral collaboration for lifelong learning (short to medium-term)
- Establish a platform for transdisciplinary dialogue
- Mobilize transdisciplinary research
- 3. Place vulnerable groups at the core of the lifelong learning policy agenda (short to long-term)
- Engage learners and educators in planning strategies
- Launch national campaigns to engage excluded sectors
- Study innovative strategies and programmes to identify successful schemes and disseminate the results
- 4. Establish lifelong learning as a common good (*medium to long-term*)
- Promote a commons-based approach to lifelong learning
- Engage in a dialogue with the corporate sector of the digital economy
- 5. Ensure greater and equitable access to learning technology (*medium to long-term*)
- Place digital technology at the service of lifelong learning for all
- Launch 'Towards 2050 digital learning technology for the common and the public good'

- 6. Transform schools and universities into lifelong learning institutions (short to long-term)
- Revise curricula
- Transform pedagogies
- Open up to the community
- 7. Recognize and promote the collective dimension of learning (short to long-term)
- Create a digital learning platform
- Promote collective learning through policy
- Celebrate learning
- 8. Encourage and support local lifelong learning initiatives, including learning cities (short to long-term)
- Promote local-level initiatives that reinforce a learning culture
- Renew community spaces for learning opportunities
- 9. Reengineer and revitalize workplace learning (medium-term)
- Increase opportunities for workplace training
- Widen access to workplace learning
- Encourage employers to support lifelong learning
- Recognize the diverse outcomes of workplace learning

10. Recognize lifelong learning as a human right *(medium to long-term)*

- Develop a legal framework for lifelong learning at national level
- Designate a government structure dedicated to lifelong learning
- Gradually introduce a universal entitlement to lifelong learning

Introduction: The Futures of Education from a lifelong learning perspective

Increasingly, the global community acknowledges that lifelong learning - available to all, at every stage and in every sphere of people's lives - is key to addressing the multiple challenges faced by humanity. Lifelong learning fosters people's capacity to deal with change and to build the future they want. This is profoundly important given the disruption and uncertainly resulting from the familiar threats and opportunities of demographic change, the climate crisis, the rapid advance of technology and, more recently, the COVID-19 pandemic. The growth of populist politics, the deliberate spread of disinformation and the resulting threat posed to democracy highlight the crucial role of lifelong learning in fostering active, informed citizenship. Lifelong learning also improves employability and entrepreneurship through skills development and creativity, enhances public health and well-being, and builds more cohesive and resilient communities. Lifelong learning is, in short, an important contributor to sustainable development, globally, and at national and local levels.

While the rich potential of lifelong learning for achieving a more equal, prosperous, healthy and peaceful future is widely recognized, it is far from being fully realized. It is important to acknowledge the progress in education achieved in past decades worldwide. Yet many challenges persist, including social and economic inequalities and the uneven global development of digital opportunities exposed by the COVID-19 crisis. Looking ahead, education systems in countries at all levels of development will be confronted increasingly with ageing societies, increasing migration, rapid technological developments and changing labour markets. The fourth industrial revolution is expected to accelerate employment changes, with new professions emerging while others become obsolete. These developments bring major social changes in their wake that demand a new concept of education and learning. As learning relates to all spheres of human life, such a reconceptualization is inevitably complex and cannot be achieved solely within the field of education.

Rethinking lifelong learning beyond the conceptual boundaries of education makes it possible to reconnect learning with larger societal spheres. This enriches reflection on the 'futures of education', with new perspectives on key areas such as the roles of institutions, the use of technology and sources of knowledge. It inspires discussion on shaping futures by connecting citizens to policy through learning. For policymaking, lifelong learning provides a framework through which to envision instruments and strategies beyond formal education systems and 'conventional' education policies. Such strategies can then better recognize the differences in people's circumstances and the multitude of learning spaces beyond educational institutions. Lifelong learning also stresses the importance of recognizing a wide diversity of social actors, beyond the traditional boundaries of education policies, and the role of communities at local

level and of learners, not only as a target of public policies but also as an agent of change.

To develop future scenarios for lifelong learning and explore its potential for social innovation, the UNESCO Institute for Lifelong Learning organized a transdisciplinary online consultation on the 'Futures of Education: A lifelong learning contribution', which informs this report.¹ Twelve experts from different fields (including demography, economics, education, philosophy, public health, neuroscience and sociology) were invited to reflect on how lifelong learning can contribute to building a desirable future by 2050 and to propose concrete measures. Their insights invite readers to reimagine education – and society as a whole – as embedded in a genuine culture of lifelong learning.

Within a humanistic vision of education, this report adopts a human-rights perspective, which

guides, among other things, its recommendations for co-creation of educational contents and an educational commons. It emphasizes the transformative potential of lifelong learning for individuals' learning pathways, as well as for communities and society as a whole.

Moreover, the report offers 10 key messages and a number of action points for implementing a new vision for lifelong learning by 2050. It is meant to enrich the work of the International Commission on the Futures of Education, established by UNESCO in September 2019. Beyond this purpose, it is hoped that this report will inspire policy-makers and the international community as a whole. Its contents should also encourage education practitioners to reflect on their pedagogical approaches, on the role of teachers and learners in different settings, and on how to instil an appetite and capacity for lifelong learning among students.

¹The transdisciplinary consultation process took place online from 26 May to 12 June 2020. It was organized by the UNESCO Institute for Lifelong Learning (UIL) in collaboration with UNESCO's Education Research and Foresight Programme, within the context of the UNESCO Futures of Education initiative.

Towards a vision of lifelong learning by 2050

A vision of lifelong learning needs to be framed within a broader understanding of the future. Hence, the first step of the consultation process was dedicated to developing a joint vision, exploring the potential of lifelong learning from the perspective of different disciplines. This collective vision was organized around the idea of a culture of lifelong learning, one that shapes how learning and knowledge production are understood and take place. The vision focuses simultaneously on the learner (motivation, abilities and ways of learning) and on the social dimensions of learning (learning as a collective endeavour, strengthening a sense of community).

This 2050 vision is of a world that has undergone a deep cultural shift based on a strong awareness of the innate potential of learning. Societies self-consciously strive to be learning societies and people identify as lifelong learners. With a continuous learning ethos pervading all spheres of life, education is seen as much more than just enrolling in a class. Lifelong learning has deeply changed how the 'typical' life course is perceived and how people deal with its complexities. As learning pathways are no longer linked to the category of age and centred on formal education, the life course has become more diversified, with education and learning taking place throughout life. Formal, non-formal and informal learning activities pervade all spheres of life, including work, family, civic engagement and leisure. Regardless of age, method or context, learners can learn whatever they choose, be it to update their knowledge or skills, to adapt to

an ever-changing environment, to get a better job or simply for the joy of enhancing skills and satisfying curiosity.

Learner autonomy is the foundation of this lifelong learning culture. Learning to learn has become a basic competence, as has managing one's own learning journey and creating one's own learning biography. Understanding all levels of learning as learner-centric presents a crucial shift to fundamentally thinking and planning education with demand in mind. This way, learners are active agents rather than passive recipients of prescribed knowledge. They co-design and use any learning process and its outcomes actively to realize their potential as fully as possible. To support individuals in building their learning biographies effectively, legal foundations and mechanisms have been established for the recognition, validation and accreditation of learning outcomes acquired in different contexts. This has led to a democratization of the negotiation processes and forums to balance individual and social learning demand.

At the same time, learning is understood as a collective process, taking place among peer groups, within communities and across generations. Education emphasizes becoming global citizens who care about each other, other communities and the planet. Consequently, lifelong learning is for all, and learning opportunities can be created for and with the most excluded learners. There is a global learning ecosystem, built collectively to inspire and empower learners with a plethora of opportunities. Communication takes place

using an international interconnected network, dedicated explicitly to learning and supporting learners. The learning ecosystem integrates diverse learning modalities fluidly, including all digital-based (artificial intelligence- or Alsupported) and real-life experiential learning as well as blends of formal, non-formal and informal learning. The learning opportunities allow for planned or spontaneous, individual or collective learning. There is easy access to faceto-face and online learning opportunities as local infrastructure, global connectivity and sponsored devices are available for all. New pedagogical and andragogical principles have been developed, including innovative blended learning concepts that integrate digital and face-to-face elements while considering learners' specific needs. Based on neuroscience research, targeted strategies have been designed to address the cognitive and emotional diversity of learners of all age groups, backgrounds and abilities. Depending on their individual circumstances, existing skills and knowledge and learning demands, learners can choose bespoke learning pathways to learn at different levels, from beginner to highly advanced stages, at the pace that suits them.

To ensure that learning opportunities are accessible to all, learning spaces beyond educational institutions have been reinvented to promote and support learning. Besides using public spaces and infrastructure for learning, there are also learner-friendly work environments in all sectors and opportunities for self-employed people. To enhance the free availability of learning resources further, an educational commons² has been developed.

The cultural shift has transformed the schoolcentred education culture, acknowledging and articulating the value of different learning systems by ensuring necessary coordination and synergy at all levels. From the lifelong learning perspective, formal educational institutions create the foundations for learning on a lifelong basis, offering both the necessary knowledge and continuous access to learning opportunities and content. Furthermore, the right to education has been renewed, recognizing lifelong learning as a human right. Education ministries have transformed into ministries for lifelong learning.

Assuming that this vision of lifelong learning has become a reality, a vast number of positive effects could be expected in all spheres of life by 2050 and beyond.

For example, the lifelong learning culture has created resilient societies with strong positive impacts on the economy and sustainability, as well as on physical and mental well-being. Moreover, lifelong learning has contributed

²The term 'educational commons' refers to the 'idea of an educational system that strives to ensure that resources for teaching and learning are freely available to teachers and students without connections, permissions, or access granted by others. These resources are thought of as a "commons" (https://www.igi-global.com/dictionary/preparing-virtual-workplace-educational-commons/38299).

strongly to inclusion and equality, especially for the most vulnerable groups. It supports social cohesion, global and active citizenship and vibrant cultures.

This cultural shift to re-imagining people as learners has deeply changed societies everywhere on the planet. There is widespread awareness of the positive effects of lifelong learning, and these effects are harnessed collectively. By focusing on learning capabilities, societies have become more resilient. Lifelong learning has enabled individuals and collectives to acquire, produce and make use of (new) knowledge systems. Thus, individuals and societies can adapt to large-scale changing (economic, social, cultural and ecological) contexts more easily and find creative solutions to problems. Through the educational commons and emergency plans for improvised education in case of disruption (such as that experienced during the COVID-19 crisis), learning and education are resilient, too.

This, in turn, has influenced the economy positively, as people are trained according to needs and are able to maximize their potential. As lifelong learning focuses on physical, cognitive and emotional diversity, it encourages flexible learning pathways and values informally acquired knowledge and skills, thus enabling people formerly excluded to enter the workforce (e.g. people with disabilities, parents with childcare obligations, elderly, people lacking certification). This allows societies to reposition the future of work and the economy in an industry 4.0 context, placing a strong emphasis on knowledge and new kinds of jobs. This shift is likely to be accompanied by a wide appreciation of learning as a social good, supported by some form of basic income.

As lifelong learning aims at learning for oneself, for others and for the planet, it also has a key role in driving sustainability. Lifelong learning is about the sustained and sustainable freedom of individuals. linking social freedom to environmental responsibility. At an individual level, lifelong learning now contributes to a greater awareness of all the dimensions of sustainability. Individuals are empowered by lifelong learning to change behavioural patterns, for example with regard to household energy consumption, recycling waste or a move towards non-thermic modes of transport. At the macro level, governments and businesses as learning organizations introduce and promote sustainable models of production and consumption. Lifelong learning in the workplace is key to ensuring that sustainable practices become fully integrated. Furthermore, the systemic thinking, anticipatory and problem-solving capabilities fostered through lifelong learning enable creative and innovative solutions to the challenges posed by climate change at local level.

The educational commons and the multiplication of learning opportunities (both physical and digital) has contributed strongly to inclusion and equality, especially for the most vulnerable groups, for example by counteracting social and economic marginalization and bridging the gender gap. Including the most vulnerable is at the heart of lifelong learning and is realized in the co-design and co-creation of learning materials, tools, programmes and ecosystems. Furthermore, there is a strong awareness and continuous engagement in areas in which inequality could potentially arise, such as through a lack of digital access or skills. By emphasizing social skills and empathy, appreciating different ways of knowing and fostering collective learning arrangements, this engagement has ingrained tolerance and mechanisms of (peaceful) conflict resolution into society. The learning navigation system also incorporates mechanisms that ensure learners are exposed to knowledge they would not ordinarily encounter and that takes them to intellectual spaces they have not yet occupied. Furthermore, formerly excluded knowledge (such as indigenous knowledge) is valued and promoted. People are trained in methods of participation, enabling them to be active citizens and to make informed personal decisions (for example, on health, contraception, breaking traumatic cycles and parenthood).

Collective learning arrangements support social cohesion and counteract isolation, they motivate active citizenship and (re)engagement in politics and promote a vibrant culture. An emphasis on critical thinking and digital literacy supports people in becoming educated citizens and enables deliberate, democratic debate. A locally shared culture of lifelong learning constitutes a key aspect of community identity, incorporating a sense of curiosity, knowledge, conviviality and collective empowerment. This also contributes to a community's sense of pride and self-regard, while fostering respect for others, thus enabling fruitful exchange and learning from each other. From a lifelong learning perspective, widening knowledge and entertaining different viewpoints, rather than simply consolidating existing learning, is crucial.

Continuous learning has enhanced mental and physical well-being in several ways. Regular intellectual engagement supports healthy ageing, while collective learning arrangements foster social cohesion and counteract feelings of isolation. Placing the learner at the centre encourages political and cultural participation and supports people in finding a sense of purpose, thus contributing to a sense of well-being. Additionally, formal and informal learning opportunities enable learning about health and healthy lifestyles. This, in turn, reduces healthcare costs to society. The promotion of lifelong learning for leisure, pleasure and enjoyment enhances collective well-being further. At the same time, huge efforts are made to ensure the fulfilment of basic needs so that everybody is able to engage in learning to their full potential.

Creating an enabling environment

Realizing the vision expressed through the consultation process requires an enabling environment for lifelong learning. This means addressing a series of issues, identifying circumstances and challenges that currently inhibit lifelong learning and mitigating these or transforming them into opportunities.

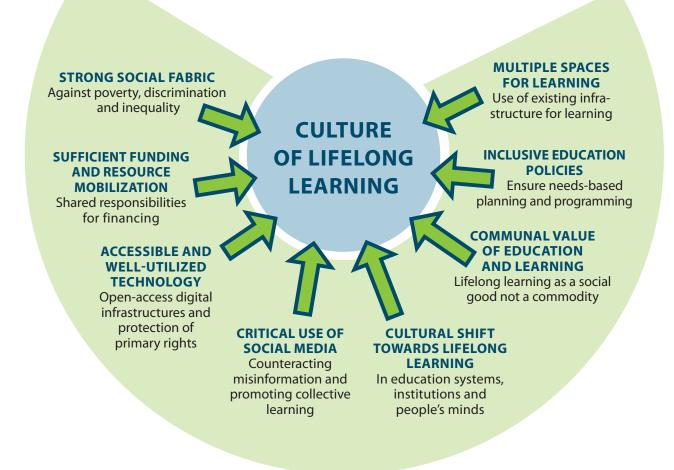


Figure 1: Enabling environment for achieving

the vision for lifelong learning by 2050

A wide-reaching culture of lifelong learning relies on a strong social fabric, which protects against poverty, discrimination and other forms of inequality; conversely, a culture of lifelong learning can strengthen the social fabric actively. Where basic needs are not met – as, for example, in cases of violence, extreme poverty, child labour, lack of food and clean water or lack of electricity and internet connectivity – there are significant barriers to lifelong learning, which further compound inequity by widening gaps in education. Educational gaps persist and are yet to be bridged by digital technologies and freely accessible online resources; in fact, these offers tend to further privilege those groups that are already at an educational advantage. This effect (known as the 'Matthew Effect') can be observed, for example, in participation patterns in massive open online courses (MOOCs). A societal shift in learning supply can counter trends towards further educational inequality by multiplying and diversifying learning sites and opportunities. If targeted at vulnerable groups, this shift in learning supply can help to reduce poverty, discrimination and inequality. In the long term, shifts in learning supply will precipitate a societal change in learning demand by increasing social interest in learning across a wider spectrum of knowledge and competencies.

To minimize discrimination and inequality in lifelong learning, it will be important to appreciate individual differences in terms of the cognitive and socioemotional diversity of learners (including intellectual ability, mental or physical disability). This can be done by translating and disseminating cognitive neuroscience findings relevant to learning, which should target individual learners, educators and policy-makers. Promoting brain sciences for lifelong learning can empower, while debunking myths that can be barriers to lifelong learning. As brain science is universal, research in nations with appropriate resources could be shared via a dedicated international portal or forum. With the rapid development of noninvasive neuroimaging research, information about the brain is increasing exponentially. Thus, such a forum needs to be dynamic and prominent to distil, discriminate and recommend useful principles for learning and education.

Diversity in lifelong learning also depends on demographic factors. For example, lifelong learning can make a major contribution to representing ageing in a more positive way and has an empowering impact in old age. A culture of lifelong learning should therefore include learning that promotes quality of life in old age. This means addressing not only older people's learning needs, but also their contribution to education, and moving these issues higher on the educational agenda, for example by paying more attention to intergenerational and family-based learning. Lifelong learning for ageing populations can be hampered by negative representations of old age and discriminatory practices that exclude older people from society. In many contexts, participation in lifelong learning decreases with age and, often, educationally disadvantaged groups of elderly populations are not represented in learning programmes. This situation needs to be reversed by a more positive representation of ageing and by the wider acknowledgement that learning can improve quality of life in old age. The strengths of and potential contributions by the ageing population can also be harnessed for economic advantage with positive effects on the future of work and the ongoing industrial revolution 4.0.

An enabling environment for lifelong learning relies on **sufficient funding and resource mobilization**. Accordingly, policies can be formulated to increase and diversify sources of funding for lifelong learning, for example by investing directly in adult learning

programmes and lifelong learning research or by providing individual enrolment incentives. This is not to say that governments are solely responsible for ensuring sufficient funding: governments, NGOs, the private sector and communities should all be encouraged to invest in various forms of lifelong learning, including seed funding for new initiatives and start-ups in this field. Funding and resources, mobilized by diverse stakeholders, are needed at each decentralized level of the learning ecosystem. Centralized funding arrangements – to which different sectors contribute, but which are overseen by the state – should be accessible to regional and local stakeholders according to specific needs (such as large populations of migrants, older populations or urban density). At the level of the facilitator, attractive remuneration should be provided to those who work with disadvantaged communities, as they direct individuals to learning opportunities and co-design the content in response to unmet needs in lifelong learning.

An enabling environment also means acknowledging the multifaceted benefits of lifelong learning, in particular, recognizing the communal value of education and learning rather than assessing them on the basis of their economic value. Strong learning communities can link social freedom to environmental responsibility and can support continuity of learning for people who are forced to migrate in the face of climate disasters, war, conflict or other forms of instability. Furthermore, the communal value of lifelong learning can be strengthened by the provision of an educational commons that promotes free availability of knowledge to everyone. In the same way that education is integral to a sense of individual self-worth and self-respect, making lifelong learning integral to the community will enhance its collective sense of pride and self-worth. The economic interests of the education industry often conflict, however, with the notion of lifelong learning as a social good. Private sector funding

for, and ownership of, educational resources are often driven by motives of profit, which can result in some forms of learning being dismissed because they are considered unprofitable. This can be the case for digital learning systems operated by the private sector. Education infrastructure that benefits learners should not be driven solely by profit: economically unprofitable learning contents need to be sustained by the state and other stakeholders if they are of communal value.

Additionally, there is a need for **accessible and** well-utilized technology. Currently, substantial digital infrastructure is in place in many parts of the world. However, existing digital infrastructure does not always serve the interests of the learner, as exemplified by violations of privacy rights and exploitation of data. Furthermore, there is a strong risk of rising inequality in digital infrastructures as they are not available to and accessible for all. Thus, technical infrastructures and learning tools need to ensure privacy and inclusivity, while openaccess and open-source movements, collaboration models and accompanying policies must pave the way to an 'educational commons', accessible to all. Furthermore, it is important to acknowledge the role and critical use of social media in the new information age. Social media platforms are major providers of informal learning opportunities, such as video tutorials on diverse topics; although misinformation, disinformation and 'fake news' constitute significant challenges, and the rejection of expertise, knowledge and facts poses a major barrier to lifelong learning. To counter the negative effects of social media on learning, digital literacy and reflection on algorithmically guided learning are crucial; so is the development of educational commons platforms with data privacy secured and an orientation towards the common good.

Most crucially, a **cultural shift towards lifelong learning** can only be achieved with a real ownership of the idea of lifelong learning for

individuals, whether by policy-makers, institutional leaders, teachers, parents or learners. A common, reductive conceptualization of lifelong learning limits it to adult education and offerings provided after completion of initial education. This means that learning opportunities throughout one's life are overlooked, and people tend to perceive lifelong learning as not relevant, either because they are already in education or because they regard further education as a hobby. There is often resistance to a paradigm shift towards a lifelong learning perspective, notably within the formal education community and institutions. A more holistic understanding of the concept of lifelong learning is needed - one which puts the innate capability to learn at the core and recognizes any learning activity throughout life as important. Communication of what lifelong learning means and what a culture of lifelong learning could be is key, especially with regard to the motivation of learners. Teachers need more opportunities to engage in new methods and pedagogies and more time and resources to take advantage of such opportunities.

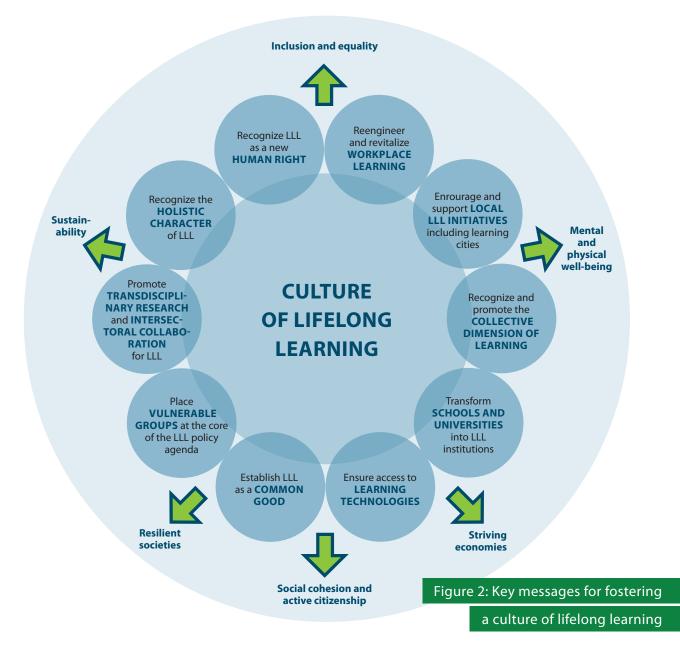
It is clear that an environment conducive to lifelong learning will not come into existence on its own: **inclusive education policies and programmes** are needed. A lack of policies (and their enactment) ensuring education for all, coupled with policies that lack a demand-side perspective and fail to involve learners in the policy-making process, prevent the realization of a culture of lifelong learning. Inclusive education policies should ensure access to digital infrastructures to counteract inequalities and should involve learners and practitioners fundamentally in planning to ensure demands and needs (especially those of the most vulnerable) are met. Additionally, a demand-side perspective can bridge learning sites conceptually and allow for learning-pathway management that focuses on the learner's trajectory rather than on a specific site offering a particular programme. Transformations in learning programme design can also foster a lifelong learning culture by multiplying potential learning pathways with micro-learning and blended learning activities, as well as with programmes that support learners entering into a new form of education, such as through programmes at colleges and universities targeting 'first generation' attendees.³

Finally, a culture of lifelong learning can be supported by taking advantage of **multiple spaces for learning**, including existing physical infrastructure. Public spaces that already host learning opportunities include libraries, museums, community centres and religious venues, while some schools and universities offer programmes with a wider public reach alongside their traditional formal education provision. Through the strengthening of those institutions (e.g. with funding and incentives), these important elements of an environment conducive to lifelong learning can flourish. In addition to other existing spaces such as clubs and associations, the workplace is another example of existing physical infrastructure that can be used for lifelong learning. While informal and non-formal learning at work are already considerable sources of lifelong learning, these processes could be further strengthened and broadened. For example, contrary to the tendency in many countries to exclude older workers from the labour market, vocational and technical training in the workplace can harness intergenerational learning for the transmission of competencies and experiences. Though a culture of lifelong learning requires innovation and the creation of new infrastructure, it also depends on the more effective utilization of pre-existing infrastructures, opportunities and practices.

³Chapman University provides a succinct definition (https://www.chapman.edu/students/academic-resources/first-generation/index.aspx) that reflects the common understanding of who 'first generation' attendees are: 'A first-generation college student is defined as a student whose parent(s)/legal guardian(s) have not completed a bachelor's degree. This means that you are the first person in your family to attend a four-year college/university to attain a bachelor's degree'.

Key messages

This section provides 10 key messages based on the vision presented above, its positive effects and enabling conditions for lifelong learning. These messages strive to revise knowledge and rethink the purposes of education and the organization of learning. They also contain tips for actionable directions such as translating visionary ideas into policy, research agendas and initiatives. *Figure 2* gives an overview of the key messages for fostering the envisaged culture of lifelong learning (LLL), indicating its expected positive effects on different dimensions of human life and on sustainable development.





1. Recognize the holistic character of lifelong learning

Although lifelong learning is a very broad concept, it is generally understood in a limited way, and often as interchangeable with narrower terms such as adult education, elder education, continuing education or skills for work. A fuller understanding of the concept of lifelong learning emphasizes that learning is lifelong and life-wide, from birth to death (*any time*) and exists in and out of the education system (*anywhere*). Learning is undertaken by people of all ages (*anyone*), takes place through a range of modalities, including face to face, at distance and, increasingly, online, and concerns all domains of knowledge (*anything*).

To provide a holistic perspective on learning, two dimensions need to be stressed. First, there is a need to recognize fully the *anytime* principle of learning and its materialization through learning pathways. For individuals, this principle results in learning biographies reflecting the accumulation and diversity of learning achievements. Acknowledging learning as a process throughout life goes beyond the conventional notion of education as a continuum strictly linked to specific ages. Everyone can learn, at any age.

Second, the *anywhere* dimension refers to the vision of an ecosystem of learning that conceptualizes offerings as a network of decentralized and diversified provisions rather than as a system. This also implies the opening of boundaries between formal, non-formal and informal learning. Non-formal learning may take place in the context of a formal education institution (such as a school or university). Likewise, formal learning may be pursued

in environments usually regarded as informal, such as the home, the workplace or anywhere else, taking advantage of mobile devices. Facilitating such permeability between previously clearly defined and separated learning contexts is key to establishing the holistic character of lifelong learning.

Adopting a networked vision of learning pathways helps to conceptualize the complexity of learning from a lifelong perspective in a more operational way. Through learning pathways management, it is possible to articulate programmatic support for learners across all learning opportunities (ecosystem of learning). This relates to the autonomy of learners to build their own learning biographies. Becoming a lifelong learner entails developing one's capacity to know more. It is about the individual's ability to learn, the availability of learning opportunities, the recognition of learning outcomes gained in different contexts and the promotion of flexible learning pathways. To implement such a perspective, the focus of lifelong learning policies must shift from supply to demand.

Thanks in large part to technological development, the many and diverse learning means and modalities available today facilitate learning pathways for every group and every person, combining education and training, formal, non-formal and informal learning, face-to-face and distance education, and directed and self-directed learning. To strengthen synergies, the validation of non-formal and informal learning outcomes is an important aspect of policies supporting a holistic vision of learning.

Action points

- Diversify learning provision: To provide easily accessible learning opportunities that respond to learning needs in a diversity of areas, it is essential to extend partnerships among a wide array of learning providers and to connect learning sites within a lifelong learning network. Education delivery must include providers that increase social and individual demand for a wider spectrum of knowledge and competencies and multiply potential learning pathways. This includes micro-learning offers and digital, mobile and blended learning activities.
- Develop a lifelong learning competency framework: A lifelong learning competency framework should provide an inventory of expected skills, competences and attitudes for lifelong learners. Conceived as an international standard, it should serve as a reference tool for countries, to be adapted and contextualized.

The lifelong learning competency framework will guide the development of a capacity to manage one's learning journey, including multiple and flexible learning pathways, entry and re-entry points at all ages, articulating formal and non-formal provision.

• Integrate recognition, validation and accreditation (RVA) mechanisms:

Such integration is key to creating flexible learning pathways that recognize non-formal and informal learning outcomes. Procedures for the RVA of prior learning should facilitate access for those who lack conventional admission requirements or those who wish to re-enter education at a later stage in life. RVA can also help to integrate broader sections of the population into an open, seamless and flexible education and training system and thus contribute to building an inclusive society.

2. Promote transdisciplinary research and intersectoral

collaboration for lifelong learning

The complex and interlinked challenges humanity is facing today cannot be solved by single disciplines or within particular sectors. They require the bringing together of collective intelligence from different fields and stakeholders (including researchers, policy-makers, entrepreneurs, educators and learners, among many





others). Learning processes must go beyond disciplinary and sectoral boundaries. Lifelong learning has been widely recognized as a powerful tool for developing more sustainable societies, economies and living environments. To harness its potential to create a sustainable future for next generations, fostering transdisciplinary approaches and intersectoral collaboration will be key. Addressing learning-related issues beyond the field of education can further help to raise awareness of the relevance of lifelong learning within different disciplines. Such collaboration is essential to achieve a shift towards a culture of lifelong learning and to support the development of lifelong learning societies.

Transdisciplinary and intersectoral collaboration should include joint research as well as the practical implementation of innovative learning initiatives, for example, the development of blended pedagogies to bridge conventional and digital learning. It needs to be acknowledged that innovations are often generated between disciplines. From the perspective of lifelong learning, one of the main challenges for education systems is to offer flexible learning pathways, within and outside formal education, allowing individuals to accumulate different learning experiences throughout life, building their personal needs-based learning biographies. As learning is life-wide, takes place everywhere and relates to many different themes, it requires transdisciplinary collaboration. Furthermore, the involvement of education practitioners, learners and the private sector, particularly in the field of information and learning technologies, is highly relevant to the development and implementation of learning tools, pedagogies and platforms.

Action points

 Establish a platform for transdisciplinary dialogue: To enable an ongoing exchange of knowledge and to create a common ground for joint efforts between stakeholders, a dedicated experts' network should be initiated and maintained. A continuous dialogue in this network would be facilitated through an online platform, based on the idea of an educational commons. Such a platform can be used for sharing learning resources and developing digital learning tools for use by a wider public. It connects experts from a variety of fields to explore the potential of lifelong learning in different contexts, engage in collaborative research and develop ways of effectively implementing learning initiatives together. The online platform can create a strong transdisciplinary knowledge base in the field of

lifelong learning (e.g. by mapping lifelong learning activities worldwide) and support participatory processes in policy-making. Openness and transparency will be key principles of this platform.

• Mobilize transdisciplinary research: Transdisciplinary research is needed to better understand learners' motivations and the skills necessary to become autonomous and effective lifelong learners. Findings from neuroscience research are key to this and should be translated into learning strategies. Transdisciplinary research is essential for the development of the lifelong learning competency framework and its contextualization to national features and needs (see Key Message 1).

3. Place vulnerable groups at the core of the lifelong learning policy agenda



Strong efforts and targeted actions to

counteract persistent inequalities are needed, especially for vulnerable groups excluded from learning opportunities (such as migrants, refugees, older people, youth and adults in risk, and people with disabilities). As lifelong learning should be for all, girls and women must have equal opportunities to learn. Education has been the primary means of reducing gender violence and poverty. Expanding learning opportunities to females across the life span will promote gender equality in all spheres of life. To foster an inclusive and just society, vulnerable, disadvantaged and marginalized groups must be placed at the core of the lifelong learning policy agenda. This not only involves targeted policies and instruments, but also mainstreaming this focus in the entire legal, policy, delivery and funding framework.

As lifelong learning includes a diversity of learning modalities, people currently excluded due to a lack of access to accredited formal education should be able to join accredited non-formal and informal learning modalities.

As a component of lifelong learning, inclusive education encourages an active role and the participation of learners, their families and their communities. Inclusivity can be assured by cocreating and co-designing with learners in order to meet their demands, especially by designing learning opportunities for and with the most excluded. In general, learning opportunities should value interdisciplinarity and physical, cognitive and emotional diversity. They should be built on the learner's needs and adapted to local contexts, thereby taking the diversity of backgrounds in terms of location, age, gender, status, religion and abilities, as a starting point rather than as an obstacle. Importantly, lifelong learning is also essential for vulnerable groups in exercising their full social rights and citizenship.

Recognizing the value of interdisciplinarity, inclusive education aims to strengthen the links between schools and society to enable families and their communities to participate in and contribute to the educational process. To improve outcomes for disadvantaged children, youth and adults, inclusive education proposes to develop coordinated efforts to tackle the factors that have put these groups in situations of vulnerability and to enhance factors that support them, across all aspects of their lives and across their life spans.

Sources of exclusion often overlap. It is common for vulnerable individuals to be affected by various factors such as gender, poverty and disability, thus amplifying marginalization. Lifelong learning policies and practices must take this complexity into account.

Action points

- Engage learners and educators in planning strategies: The participation of learners and educators in planning is necessary to ensure demands and needs (especially of the most vulnerable) are met. Adopting holistic approaches when co-designing and cocoordinating programmes and strategies will contribute to addressing learning needs and demands in a comprehensive manner.
- Launch national campaigns to engage excluded sectors: The identification and engagement of deprived segments of the population constitute prerequisites for the design and implementation of effective policy responses and programmes. Launching national campaigns involving cross-governmental ministries can be instrumental in making policies participatory. Such campaigns require centralized funding (involving all social partners with a key role for the state) accessible

at regional and local levels and according to specific needs (high level of immigration, elderly population, illiterate population).

 Study innovative strategies and programmes to identify successful schemes and disseminate the results:

Inclusion remains an under-researched yet significant topic for lifelong learning and sustainable development. More information is needed to locate promising initiatives, and research is key to identifying successful schemes, to advocate and to disseminate. This could be coordinated through the lifelong learning platform (see Key Message 2) by showcasing different efforts in various contexts, firstly, to build awareness, then documenting solutions that could inspire initiatives in other environments.



4. Establish lifelong learning as a common good

To ensure the availability and accessibility of

learning opportunities for all, the trend towards market regulation of education provision should be gradually replaced by a commons approach through which voluntary social collaboration in open networks is used to generate social-environmental value. This perspective derives from the notion of common goods, defined as goods that benefit society as a whole and are fundamental to people's lives. Establishing education resources and related tools, including IT solutions, as common goods allows institutions to manage them as commons, sustainably and equitably, in terms of participation, access and use. This approach provides free access to learning tools and materials, co-designed and co-created for and with the most excluded, as directed by demand. To foster access, all digital learning tools are designed to fit a wide variety of devices, especially smartphones. These commons-based tools and resources should be installed and maintained jointly by individual learners and educators, grassroots learning initiatives and public services. Importantly, from a lifelong learning perspective, the learning materials and tools must be fundamentally open to everyone; anyone can participate in their creation and peer-review. Such a commons approach enables a joint effort to organize learning tools and resources by involving learners, initiatives and political actors. This should involve establishing democratic governance of lifelong learning as a common good and recognizing learning contents as a shared resource, accessible to all and governed as a collective responsibility.

Action points

 Promote a commons-based approach to lifelong learning: This means promoting and facilitating peer-to-peer collaborative production of learning resources, encouraging people and communities, including learning cities, to engage in this movement as part of a broader dynamic to stimulate active citizenship. To establish an educational commons – the free availability of teaching and learning resources – lessons learned from the experience of government and civil society initiatives around the concept of commons (such as open access, open source, open educational resources and co-operative online platforms) should be applied to lifelong learning initiatives. While some of these efforts take place in societal niches, they offer tested models for an educational commons and represent an excellent starting point.

• Engage in a dialogue with the corporate sector of the digital economy: An initiative is required at the international level to engage in a dialogue with the dominant corporate actors of the sector with a view to defining the strategy and tools needed to make lifelong learning technology open. The process followed for the OER (open educational resources) movement could provide some useful insights.



5. Ensure greater and equitable access

to learning technology

Lifelong learning systems must evolve in response to rapidly changing societal needs and must take advantage of new opportunities; technology has a major role to play in achieving this. In an increasingly online world, people should be able to acquire and continuously update the digital skills needed to fully participate in the economy. This should be possible as workers and consumers, but also in society at large as autonomous learners and active citizens. As such, digital skills are paramount to achieving key policy goals, including maintaining employability, meeting labour market needs in the fourth industrial revolution, strengthening social inclusion and contributing to a vibrant democratic life. In education, including adult education, digital technology can offer innovative ways to engage, support and assess learners. New digital technologies already provide opportunities for more adaptive, personalized and responsive learning. This capacity has the potential to widen access to those currently excluded from education. Importantly, this shall not only be about access to technologies, but also about gaining the ability to use them efficiently. However, evidence emerging from the COVID-19 pandemic suggests that the shift to online provision has reinforced exclusion and deepened inequalities. Particular policy attention and funding are therefore needed.

Lifelong learning has an important role to play in contextualizing the use of technology and highlighting its application in different parts of life and learning. The distinction between formal, non-formal and informal learning has been a key element in making sense of what is being learned through digital technology. This is particularly evident where people's educational experiences are framed from an 'everyday life' perspective. Such a contextualized approach differs from the standard, context-free descriptions of technology-based learning. Learning always takes place within the context of people's lives, the communities they live in, the social groups they belong to, and the wider societal milieu. Lifelong learning is a useful concept to highlight these issues - as well as foregrounding the differences in people's 'life' circumstances (e.g. related to ageing or socio-economic status). ICT and, increasingly, artificial intelligence (AI), offer potentially unlimited opportunities to contextualize learning. Further investments are needed to develop ICT-based personalized lifelong learning management systems, building on the existing frameworks and technology. Increasingly, these systems will include responsive learning activities that answer learners' educational demands in real time. Facilitated by AI, virtual assistants will be able to propose guidance for further learning. In addition, new technologies will allow learners to have assessments of capabilities from all sorts of learning experiences compiled and validated, leading to micro-certification.

However, digitalization also carries a risk of infrastructures not serving the interests of the learner, for example through violation of privacy rights and exploitation for data. Rising inequalities resulting from considerable disparities in access to technology also constitute a major concern. Hence, technical infrastructures and learning tools need to ensure privacy and inclusivity for all. Making technology open is becoming central to the lifelong learning agenda. While the promotion of lifelong learning would require a diverse and open internet, in reality, the digital education sector is increasingly commercialized and dominated by a few global companies. The partnerships established during the COVID-19 pandemic, through the UNESCO Global Education Coalition, point towards ways of addressing this issue.

Action points

• Place digital technology at the service of lifelong learning for all: In the context of the COVID-19 pandemic, the exceptional reorganization of education services has created a worldwide maelstrom of experiment and innovation. Channelling that spirit through a long-term structured initiative could convert ad hoc responses into transformative educational and learning infrastructure and provisions. UNESCO could prolong the initiatives it put in place in response to the COVID-19 health crisis, forging them into a permanent initiative aimed at putting digital technology at the service of lifelong learning for all.

Launch 'Towards 2050 – digital learning technology for the common and the public good':

The purpose of this initiative would be to ensure that educational technology is developed for and with learners as part of the educational commons. This would involve promoting publicly owned technology development and fostering cooperation with industry and tech communities willing to work in the interests of and for the public good. Such an initiative would identify and upscale existing promising technological tools and collective management models. Particular attention should be paid to excluded groups with a view to reducing educational inequalities.



6. Transform schools and universities into

lifelong learning institutions

The lifelong learning perspective recasts the role of educational institutions and highlights the need to transform schools and universities into lifelong learning institutions. In addition to

securing quality education and adequate funding of formal educational institutions around the world, this involves a shift in the mandate of those institutions. Instead of understanding their mission mainly as teaching particular subjects to clearly defined groups of students (from pre-primary to higher education), the mandate of schools and universities should be widened to include all members of the community. Consequently, this implies a responsibility both to prepare students to become lifelong learners and to provide lifelong learning opportunities to all people, irrespective of age and educational background. Such a changed mandate requires more openness in terms of access to educational institutions through multiple learning pathways, depending on the learner's abilities and needs. Yet, existing practices represent obstacles to such transformation, for example, rigid funding schemes, college admission criteria, hiring based on certificates, low recognition of non-formal and informal learning and lack of opportunities for teachers to introduce new pedagogies, among others.

It is clear that the proposed transformation requires fundamental changes and appropriate resources to implement them. The role of teachers and the applied pedagogies are also affected by this, meaning that the teaching role could shift from being an instructor of knowledge to being more of a guide and facilitator of learning processes. In addition to subject-specific learning, teaching should focus strongly on fostering social competencies, instilling curiosity and helping students to maintain it.

Action points

- Revise curricula: Schools and universities must revise their curricula to transform into lifelong learning institutions. In the case of schools, further research should be encouraged to determine what kinds of learning and content need to be included in primary curricula to prepare students to become lifelong learners and equip them for the future. As for universities, more flexibility is needed in terms of study programmes and learning formats, including the introduction of stackable credits as an alternative to full degree programmes.
- **Transform pedagogies:** Educational institutions should shift their attention from 'what to learn' to 'why and how to learn'. This means that knowledge needs to be contextualized and linked to students' prior knowledge and experiences. Importantly, content should be adapted to regional and

cultural contexts, considering what relevance knowledge has for learners. Transforming pedagogies further implies that teaching and learning are guided by the principle of epistemic pluralism, meaning that teachers cultivate a critical and explorative attitude among students and support the development of different perspectives on particular subjects.

 Open up to the community: Schools and universities should cater to the needs of the wider community by making their facilities and resources available for adult learning and education. Furthermore, schools in particular are in a good place to reach out to members of children's families and provide knowledge about relevant issues related to health, finances, literacy, citizenship education and community engagement to develop learning communities, among other topics.

7. Recognize and promote the collective

dimension of learning

Learning is about learning from and with others. As such, it is essentially a social process. Learning as a collective endeavour is deeply rooted in all cultures and is evident in concepts such as learning neighbourhoods, learning circles, and learning communities and families (see Key Message 8), all of which acknowledge the social dimension of learning. Specific ways of harnessing collective learning at micro-level are peer-learning, intergenerational learning, mentorships or special interest learning groups. The roles of teachers and learners become interchangeable in such collective settings, as people share their expertise while, at the same time, learning from others. Furthermore, this understanding of learning and knowledge development can offer new social roles, e.g. for elderly people or vulnerable groups, teaching crafts, sign language, indigenous knowledge and childcare.



This collective dimension puts renewed emphasis on face-to-face learning, particularly in public spaces. At the same time, it acknowledges the potential of new technologies, enabling digitally linked learning collectives with similar interests. Furthermore, this collective dimension emphasizes that education is guided by the idea of educating to care, not to compete. Learning is about becoming global citizens who care about each other, other communities and the planet. Such understanding promotes social cohesion and is a crucial aspect in building learning cities or working towards the creation of a learning planet. Highlighting the social dimension of learning also fosters greater recognition of the efforts made by community members to initiate locally relevant learning opportunities or the engagement of people who create digital learning spaces and maintain them as an educational commons.

Action points

• Create a digital learning platform: The development of a digital learning platform offers great potential for bringing people together online to foster collective learning at a larger scale, without limitations of space. Such a platform can provide a digital tool for individuals to guide and track their own learning pathways. This sort of personalized learning management

system can connect learners based on interests and needs in a collaborative learning support network of people and organizations. To serve the global community, the platform needs to be implemented in the public domain as part of an educational commons. While having international scope, it should be adapted to fit local needs and contexts.

- Promote collective learning through policy: As recognizing the collective dimension of learning is an essential part of promoting lifelong learning, it should also be reflected in and supported by policies. Policies should be conducive to establishing and maintaining collective learning environments and activities. This includes the provision of adequate funding to support collective learning for vulnerable groups, to foster physical learning spaces (educational institutions, other cultural public places, work environments, etc.), to access digital tools freely, to provide incentives for learning organizations and to support further research on the social dimension of learning.
- Celebrate learning: Holding regular learning events and festivals fosters a positive attitude to learning and encourages people to participate. Celebrating learning in a festival atmosphere brings the community together and encourages people to discover lifelong learning opportunities in their environment. It also helps mobilize new partners to sustain and increase public interest in and enthusiasm for learning. Celebrating learning inspires and empowers learners to contribute to taking care of themselves, others and the planet.



8. Encourage and support local lifelong learning initiatives including learning cities

Local lifelong learning initiatives are a crucial part of bottom-up change towards a culture of lifelong learning. Within urban or rural local environments, they create and maintain crucial parts of the learning culture that stretch beyond educational institutions, encompassing a great diversity of learning opportunities.

A variety of initiatives can support this social articulation at local level and help to achieve a better understanding of the value of learning: learning cities and villages, learning communities, neighbourhoods and circles, and learning families. All have in common that they understand learning as a social practice, which refers to learning with others and sharing resources.

Cities are favourable settings for promoting lifelong learning for all with their population density, available infrastructure and capacities. The concept of 'learning cities' is a people-centred and learning-focused approach, which provides a collaborative, action-oriented framework for working on the diverse challenges that cities increasingly face. There are good examples worldwide of cities that have managed to foster a lifelong learning culture by connecting education and training institutions and cultural institutions and engaging a wide range of partners such as public-sector representatives, civil society organizations and employers. Such environments enable citizens to relate their learning to daily activities within their immediate environment and to build their own learning pathways based on their particular demands. They enable them to make informed judgements and decisions and to become agents of change and transformation.

At community level, learning opportunities often include spontaneous forms relevant to the specific needs of communities, such as initiatives to promote environmental sustainability, forge new types of solidarity (as illustrated during the COVID-19 crisis), counteract sexual harassment, prevent home or gender-based violence or support women's health. These community-driven initiatives are key to achieving the potential of lifelong learning and often encourage intergenerational learning (e.g. using residential care homes as learning sites). Together, they have an important contribution to make to achieving important goals such as improving well-being, stimulating entrepreneurship and promoting active citizenship.

An even smaller unit is the family. The concept of a 'learning family' focuses on intergenerational communication and recognizes the potential of specific interactions between members of the same family for enhancing learning at all ages. The example of the learning family – in addition to the learning neighbourhood and study circle – shows that lifelong learning is also cultivated at the micro level among small groups of individuals.

Encouraging and supporting local lifelong learning initiatives is strongly connected to the (re)creation of spaces for learning (schools, libraries, museums, theatres, parks, etc.) and to connecting learning to other aspects of life by bringing people together and inviting them to reflect on issues of relevance to them. Hence, supporting learning communities fosters active citizenship and social cohesion.

Action points

 Promote local-level initiatives that reinforce a learning culture: Promote a variety of collective arrangements for learning at local level. Initiatives such as learning families, study circles, learning neighbourhoods, learning cities, learning territories, regions, etc., with a people-centred and learning-focused approach, provide the basis for fostering a learning culture within local communities. They also offer a collaborative, action-oriented framework for addressing locally the diverse challenges that society increasingly faces.

• Renew community spaces for learning opportunities:

Encourage and support local lifelong learning initiatives, renewing community spaces for learning opportunities. Many existing (public) spaces, especially public libraries, museums, community centres and religious venues, are already entry points for continued education. As they already host learning communities and opportunities, they could be supported and tasked to further engage in that direction.



9. Reengineer and revitalize workplace learning

To foster workplaces as spaces for lifelong learning, reengineering and revitalizing workplace learning is key. Workplaces across sectors, including for the self-employed and those working in the informal economy, are potentially important learning environments, even more so if enterprises become learning organizations. Workplace learning is a crucial driver for lifelong learning and becomes increasingly important, considering the ongoing transformation of the nature of work and the changes taking place in the labour market. Understanding workplace learning as part of a culture of lifelong learning enables learners to engage more easily, with a goal to retrain, undertake further training, adapt to changing work organization or change occupation. Additionally, it can, when needed or desired, support the wish to remain longer in the labour market.

Revitalizing and reengineering workplace learning helps individuals build learning biographies. Its conceptual integration into a culture of lifelong learning supports diverse learning pathways and journeys, fostering the inclusion of physical, cognitive and emotional diversity and valuing knowledge and skills acquired informally. Fostering a culture of learning in the workplace can also contribute to the inclusion in the labour market of people who were formerly excluded (e.g. people with disabilities, parents with childcare responsibilities, the elderly and people lacking certification). Such an approach can build on current workplace learning opportunities, especially on existing formal and informal mentorship schemes in which vocational and technical training harnesses intergenerational learning for the transmission of competencies and experiences. Additionally, workplace learning can be made more accessible with improvements in digital technology.

For workplace learning to reflect a culture of lifelong learning, there is a need to individualize learning opportunities in response to each worker's needs, whether that means strengthening literacy, numeracy or digital skills, learning through structured work experience or training in specific subjects. Restrictive workplace learning, focused on workers' adaptation, should be replaced by more progressive models, focusing on developing workers' autonomy at work, as well as flexible, short courses and various incentives, including financial rewards and options for recognition, validation and accreditation.

Action points

- Increase opportunities for workplace training: For workplaces to become wellestablished learning environments, a significant increase in support from the workplace is required, in particular from small enterprises and for those engaged in self-employment or working in the informal economy. This includes supporting easier access to programmes or single courses for vocational training, whether implemented directly in the workplace or at a nearby school, university, online or other learning space. Mentorship schemes in the workplace also constitute valuable options for training by combining the transfer of expertise within the workforce.
- Widen access to workplace learning: Learning opportunities in the workplace need to be available to all. A major prerequisite for inclusivity is ensuring that prospective learners have the financial means to engage in learning in the workplace. This highlights the need to revisit funding schemes, including fiscal incentives, and to explore new rights for workers.
- Encourage employers to support lifelong learning: In addition to supporting and funding

schemes, employers should also encourage workers' participation in lifelong learning by granting special leave for this purpose. Furthermore, they should contribute to establishing an appropriate information and guidance system, at company or sector level, that supports workers in navigating an increasingly rich lifelong learning environment. Social dialogue is key to achieving such developments.

 Recognize the diverse outcomes of workplace learning: Recognition, validation and accreditation (RVA) procedures, including for prior learning, are key to promoting workplace learning. Yet they are still either non-existent or too cumbersome. It is therefore necessary to simplify processes for undertaking the RVA of workplace learning, which largely involves non-formal and informal learning, by ensuring national frameworks for RVA are communicated effectively and are implemented by employers. Improved RVA procedures within and across workplaces will lead to the empowerment of employees, making skills both visible and transferable (see Key Message 1).

10. Recognize lifelong learning as a new human right

The right to education must be renewed, reaffirming lifelong learning as human right. This right is thus no longer limited to accessing the school system, but rather serves to guarantee continuity of learning throughout life, including relevant guidance and digitally portable assessment of all learning outcomes.

On this basis, this new right would need to be strongly translated into legislation, policy and practice. At national level, it should be incorporated into wider legislation governing access to education and defining workers' rights and entitlements. As is already the case in a few countries, it could be established increasingly as a separate right. Once in place, its implementation would require related policies; globally, policy development around the right to lifelong learning remains at an early stage. Access to learning should be guaranteed through online and offline options in all countries, at all times and in all languages (including braille and sign languages) and free of charge through an educational commons. This includes a need to ensure access to digital infrastructures to counteract inequalities.

Lifelong learning is strongly connected to the idea of learning as freedom with an ecological dimension. On the grounds of it being a human right, lifelong learning could also serve as an indicator of social justice. As such, lifelong learning would not be defined only as an individual right but also as a social right universally accessible to all citizens. Placed in a sustainable development perspective, where learning for the planet is key, lifelong learning appears as a human right for the planet and as what should become a 'planetary' public good. This leads to knowing ourselves better, learning about other communities and learning to take care of the planet. In this framework, lifelong learning would no longer be guided mainly by the need to educate the next generation of workers, but by the superior imperative of educating global citizens: citizens who care about each other, other communities in the world, and about the environment.

Viewed as a human right directed at the holistic dignity of human beings, lifelong learning should be guided by three imperatives:

- 1. *Access to learning:* always, across countries and languages.
- 2. *Resilience:* an educational commons that can withstand different crises: ecological, economic, epidemiological and political.
- 3. *Transparency:* learning resources and facilities, including software and technology, must be open and part of the public domain.

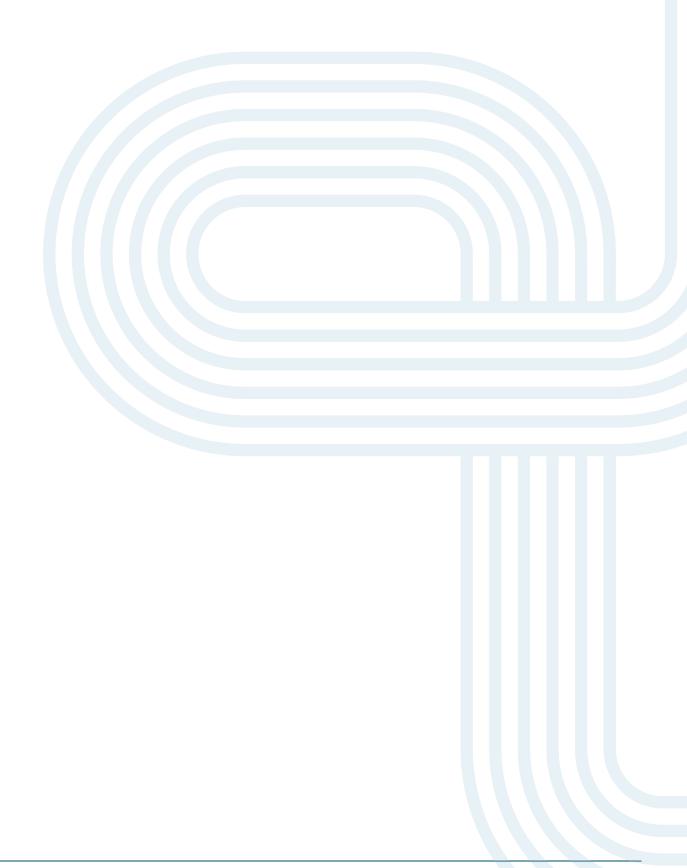
Action points

- Develop a legal framework for lifelong learning at national level: The normative foundation of lifelong learning exists in international human rights treaties. Among the most recent sources are the 4A framework (Accessibility, Availability, Acceptability and Adaptability) for implementing the right to education (ECOSOC, 1999), the fifth International Conference on Adult Education (CONFINTEA V in Hamburg, 1997), which declared that 'the recognition of the right to education and the right to learn throughout life is more than ever a necessity', and, following the adoption of the Sustainable Development Goals, the 2015 UNESCO Recommendation on Adult Learning and Education, which recognizes 'adult learning and education as an essential component of the right to education and a key pillar in the education system'. On this basis, lifelong learning as a human right must be legislated for in the form of a lifelong learning act of parliament. This should be accompanied by clearly articulated policies positioning lifelong learning as an organizing principle, but should also ensure integrated provision, guaranteeing free access and full participation for all. The role and responsibilities of the state would, therefore, need to be redefined in accordance with the human right dimension of lifelong learning.
- Designate a government structure dedicated to lifelong learning: At national level, such a renewed right to education could eventually transform education ministries into ministries with a lifelong learning mandate that efficiently coordinate the intersectoral

network of learning. They would then not only manage formal education services from pre-school to advanced education but also coordinate the extended network of partners to provide diverse educational offers in a variety of learning sites, online and offline. Ministries would then have the responsibility of ensuring that individual learners and learning collectives have the opportunities and access they need, building strongly on demand-led and participatory approaches to do so. This requires diversifying policies and strategies to accommodate the specific needs and desires of local communities, groups and individuals. Accordingly, they would ensure that the technology needed for learning is widely available at low or no cost for the most disadvantaged members of society.

• Gradually introduce a universal entitlement to lifelong learning:

Introducing a universal publicly funded right to lifelong learning would require the creation of a universal entitlement establishing learning as a fundamental right of citizens. The modalities and specific provisions of such an entitlement would need to be country-specific. Considering that, in many economies, far more people are likely to be in part-time paid employment or excluded from paid employment, the entitlement could be part of a universal basic commitment, in which being involved in personal development learning and/or learning for the good of one's local community would be recognized as a social activity.



Conclusion: Towards a culture

of lifelong learning

While the concept of a learning society and

the idea that every individual must be in a position to continue learning throughout his or her life have been debated for almost half a century, a number of factors have hampered progress, including in countries with the most developed education systems. Making lifelong learning a reality requires more than innovative policies, more funding or better technology. It demands a radical change, a cultural transformation involving all stakeholders, in particular governments, individuals and employers, as well as rural and urban communities, notably learning cities.

In most countries, lifelong learning has been understood as an auxiliary system rather than a central concept for education and social policies. This truncated view has resulted in fragmented reforms, effectively disconnecting lifelong learning from the core of education systems and policies. Realizing the vision articulated in this report will therefore require a cultural change towards recognizing the value of lifelong learning as a public good, a human right and a key instrument to serve a number of major policy goals. These goals include employment, labour market change, health and well-being, environmental sustainability, active citizenship and social inclusion and cohesion.

Building such a culture requires sustained efforts and major changes in the way lifelong learning is conceptualized, delivered, organized, structured, funded and valued.

Finally, adopting the concept of lifelong learning in its entirety requires societies to re-think learning

and education as truly life-long and life-wide. This emphasizes learner-led development of learning pathways and stresses the key role of the early phases and institutions of learning. Pre-school (with its institutions and the family) and primary education (and schools) form the foundation and enable people to become truly lifelong learners. With diverse learning pathways, spaces and modalities widely available, everyone – from children to the elderly – can benefit from learning experiences at any time and in any place.

Largely overlooked, the collective dimension of learning, with its emphasis on learning to care, needs to be fully recognized and promoted. Lifelong learning is about learning from others and with others; it is an educational process as well as a social one. This stresses face-to-face learning opportunities and intergenerational learning. Above all, it demands placing poor, vulnerable, disadvantaged and marginalized groups at the core of the lifelong learning policy agenda. This means defining targeted policies and instruments and, above all, mainstreaming this focus into legal, policy, delivery and funding frameworks. Designing for and with the most excluded is a crucial vantage point to shape the futures of learning.

A lifelong learning culture promotes learning 'beyond the walls' and invites rethinking the organization of learning to create and foster learning ecosystems. This involves building bridges between top-down and bottomup initiatives to create an ecosystem that encompasses formal, non-formal and informal,

online and offline learning opportunities. Part of this is encouraging and supporting local lifelong learning initiatives, including learning cities. Crucially, creating learning ecosystems includes transforming schools and universities into lifelong learning institutions. This would involve changing the mandate of those institutions to make them responsible for preparing young people to become lifelong learners and for providing lifelong learning opportunities to other members of the community. In line with such a change, the accountability system for these institutions would need to be reformed to make them accountable to the community at large. Furthermore, the lifelong learning culture must also be rooted in the labour market, which means reengineering and revitalizing workplace learning, including intergenerational learning through mentorship schemes.

While both conventional government funding schemes and market-based principles have failed to mobilize sufficient resources to ensure access to lifelong learning for all, emerging collective and collaborative approaches suggest a way forward, in harnessing innovative responses to achieve universality in a sustainable manner. The digital revolution has opened the door to many collaborative forms of creating and sharing knowledge and education resources. Community-operated spaces (i.e. hackerspaces, makerspaces and fab labs⁴) offer evidence of the feasibility of new forms of knowledge production and sharing. They are based on a distributed local production model articulated to open sources at global level. Recognizing lifelong learning as a common good and adopting a commons approach to guide the formulation

of lifelong learning policies and the design of lifelong learning instruments calls for the democratic governance of lifelong learning as a public good. It also requires recognition of the fact that learning contents must be a shared resource, accessible to all and governed as a collective responsibility. Making the internet and AI central to the lifelong learning agenda and applying a commons approach to education involves making technology gradually open and accessible to all. Promoting lifelong learning for all requires an open internet, free from commercial motives. Hence, opening dialogue with the corporate actors of the sector is a priority for achieving the vision.

Addressing the challenges of the twenty-first century and shaping a sustainable future for democratic societies calls for valuing lifelong learning as a new human right. This has implications for the international community, including UNESCO, and for countries, especially concerning the establishment of a legal framework for lifelong learning.

As illustrated throughout this report, reimagining the future of education from a lifelong learning perspective can help us think our way to a future that is more cohesive, sustainable, inclusive and generally brighter. Reconceptualizing lifelong learning and its organization within a learning ecosystem from the perspective of learners and their pathways along and across the life course is the essential starting point in achieving this societal shift.

⁴ A 'hackerspace' (also referred to as a hacklab, hackspace or makerspace) is a community-operated, often 'not for profit' workspace where people with common interests, such as computing, machining, technology, science, digital art or electronic art, can meet, socialize and collaborate: https://en.wikipedia.org/wiki/Hackerspace.

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Annex 1: A selection of implementation measures

Key for indication of relevance and urgency of implementing the measure:

low medium high very high

The time frame given (between now and 2050) indicates the starting point for implementing the measure.

Establishing a continuous dialogue on lifelong learning –	Relevance
enabling transdisciplinary research, disseminating knowledge	Urgency
and connecting pioneers of lifelong learning	Now – 2025

This measure aims to create and maintain a network and platform for transdisciplinary dialogue, research and knowledge dissemination, as well as intersectoral collaboration on lifelong learning. It provides a space to share current research on learning-related issues, to address open questions and to identify gaps for further exploration. It engages a wide range of stakeholders (e.g. researchers, educational practitioners and learners) and allows them to find and discuss overlaps in their disciplines and to better determine how cross-cutting issues, such as gender, poverty, climate change and inclusion, can be addressed jointly. Regular face-to-face and online events help to foster continuous exchange and to build transdisciplinary alliances for lifelong learning.

The transdisciplinary dialogue should be complemented with specific research projects. First, a lifelong learning competencies framework should be established to make explicit the skills needed to become an autonomous and effective lifelong learner. Such a framework can serve as a reference point for policies and guide learning provision and capacity development by any public or private provider. Second, a joint research and practice project should be initiated on the development of blended learning, bridging analogue and digital means and serving different target groups. The research should aim to explore teaching and learning concepts further, to produce a toolkit, to continue hub-like initiatives started online during COVID-19 and to extend to adult education and lifelong learning.

The network and platform support public communication and raise awareness for a culture of lifelong learning. This, in turn, helps to place lifelong learning research on the agenda of funding institutions. Collecting and showcasing successful lifelong learning projects worldwide, including via social media campaigns, will inspire further action. A prize for social innovation could be awarded to lifelong learning initiatives and learning can be celebrated (e.g. by organizing a learning week around International Day of Education). Mapping lifelong learning activities worldwide can form a basis for continuous monitoring with a goal to reach the vision for lifelong learning by 2050.

Offering targeted learning opportunities to	Relevance
vulnerable groups, specifically women and	Urgency
migrants/refugees	Now

To place vulnerable groups at the core of the lifelong learning policy agenda, it is crucial to offer targeted learning opportunities that are designed especially for and with those groups. To understand the current activities and needs of vulnerable groups, it is essential to work with them and to co-design responses within an ethos of 'nothing about us without us'. Such a collaborative approach ensures accessibility and inclusivity.

Achieving this measure begins by identifying pre-existing initiatives and interconnecting them. This will help to create a network for collaboration, increase awareness of the benefits of lifelong learning and support the development and dissemination of potential solutions to existing challenges.

National campaigns involving cross-governmental ministries and coordinated policies would help to start new initiatives and support existing programmes for vulnerable groups. These programmes would focus on basic skills such as literacy and digital training and would also include support and counselling, for example to cope with traumatic experiences and overcome cycles of violence. Facilitators and outreach workers at the local level, who are accepted by the respective community, play a key role in this process. Funding mechanisms should include direct support to individuals to foster learning. In addition to scholarships and educational loans, unearmarked grants should be provided to specific groups, such as vulnerable women, to foster their financial independence and support them in reaching their personal aspirations.

To ensure wide access to learning, agreements should be established with universities and other providers to make online delivery free to all.

Creating learning organizations and learning cities/territories	Relevance
	Urgency
	2025 – 2030

To promote the social dimension of learning, it is crucial to support and stimulate the development of learning communities, as exemplified by the experience of learning cities and the development of communities of practice and peer-to-peer learning models. The creation of learning organizations and cities strongly depends on bottom-up initiatives. Fostering exchange and disseminating good practice is key to inspire local initiatives, including community-driven projects. On an individual and group level, collective learning can be promoted through the open-source movement and a collaborative work perspective, which produces a practical framework of ways to share. Moreover, this perspective on the social dimension of learning also emphasizes intergenerational learning activities that, in turn, reinforce the development of learning communities. Fostering those ways of collective learning is key to promoting lifelong learning and can contribute to initiatives in various other domains of sustainable development (poverty reduction, health, housing, environmental protection, water and food security, among others).

To support the creation of learning organizations, learning between organizations needs to be fostered at national and local levels, notably through policy sharing. At local level, the UNESCO Global Network of Learning Cities can contribute to this development further by intensifying targeted exchange between cities. At national level, ministries of education with a strong focus on lifelong learning should facilitate and coordinate such initiatives by providing expertise, incentives and funding.

Supporting communities to create physical spaces for face-to-face informal learning	Relevance
	Urgency
	Now

To encourage and support local lifelong learning initiatives, it is important to reinvent and revitalize physical spaces. (Re)creating such spaces for learning is also connected to the learning cities concept and to the idea of learning territories.

In addition to creating new and using existing spaces for learning, this measure is about fostering peerto-peer and intergenerational learning through a diversity of learning activities (such as youth explaining new technology to the elderly, the elderly teaching the young specific skills, reading clubs, greenhouse building, childcare, manual job-related skills, programming, indigenous languages, birth control or breaking traumatic cycles). Learning opportunities at community level can also connect learners to civic engagement, especially as they provide a cohesive social fabric and support education to care. Physical spaces provide 'one-stop shops' with skilled, knowledgeable personnel who know the local community well. Lifelong learning experiences instil life skills, attitudes and values (ethics, human dignity, impartiality, tolerance, combatting hyper-individualization) that would allow learners to participate fully in society. Such one-stop shops connect learners with a shared interest in a social cause. They support local interest groups in coming together and testing new ideas for increasing access and opportunities for informal learning. Additionally, offering physical learning opportunities balances the potential risks of digitalization connected to digital infrastructures and catastrophes.

These spaces should be developed together with communities, supported by national and local funding. 'Lifelong learning ambassadors' could participate in events that promote social inclusion and related topics, thus using the lifelong learning purpose to create strong networks with communities.

	Relevance
Co-creating an educational commons	Urgency
	Now – 2025

To establish lifelong learning as a common good and ensure open technology, creating an educational commons with a demand-driven perspective is crucial. Learning materials, tools and ecosystems for lifelong learning should be co-designed, co-created and freely available and accessible to all, especially with regard to learning material. They should offer different entry points for all levels. Materials, tools and ecosystems should be designed to fit the diversity of learners and to consider the specific needs of vulnerable groups, in particular. Furthermore, they should be responsive to local requirements and sensitive to different points of view.

To enable learners to participate in such co-design of learning materials, tools and ecosystems, courses should be offered to support the acquisition of the necessary skills. Simultaneously, a commitment from formal and non-formal educational institutions to procure and use these systems must be supported. The evaluation of learning materials and tools should be ongoing, involving a rating from experts as well as learners.

Moreover, managing a system of educational commons will require new infrastructures of collective management, such as open–access platforms. The technology needs to be sustainable and durable in terms of hardware and software. To ensure those aspects, governments must grant financial support for the development of open education platforms, applications and resources. Additionally, collaboration with companies willing to work for the public good must be encouraged. Establishing an educational commons should make use of existing learning resources and integrate existing and new access points. Finding existing resources and jointly exploring potential methods of online and offline distribution should be supported. For example, the dialogue platform (see Key Message 7) could host learning materials that are freely available as downloads and/or link sources.

Developing digital lifelong learning navigation systems

Relevance

Urgency

Now – 2030

To support learners in creating and managing their learning biographies, tools need to be established that guide learners (collectively and personally) on their learning pathways. Those navigation systems bridge different learning modalities and make the whole learning ecosystem accessible.

Digital lifelong learning navigation systems should include a personalized system for self-directed learning as well as an online directory listing current (and past) learning and training activities. Together, they should allow individual learners and learning collectives to find matching learning opportunities so they can harness existing experiences, strategies and insights and find ways to continue their learning endeavour. Navigation systems should include different learning modalities that foster the integration of different learning opportunities throughout the learning ecosystem. Supported by artificial intelligence, they could also suggest potential new topics for learning. Moreover, those tools would enable people to come together to pursue common goals, thus creating learning collectives and facilitating learning across institutions and spaces. Additionally, 'learning navigators' offer great opportunities for the collective development of the learning ecosystem, e.g. by crowd-sourcing existing (informal) learning activities and uncovered learning needs.

Those tools need to be co-created under an educational commons licence and designed for the most excluded. They should be initiated and maintained through a research consortium accompanied by an open–source community.

Supporting institutions of the formal educational sector,
such as schools, universities and vocational training
institutions, in taking a lifelong learning perspective

Relevance Urgency 2025 +

Formal education institutions form the backbone of lifelong learning and have to be strengthened, yet simultaneously transformed into lifelong learning institutions.

Pre-primary and primary schools are key points at which to immerse learners into a culture of lifelong learning. Teachers should encourage lifelong learning from an early age, fostering curiosity and a spirit for exploring the unfamiliar or unknown. The cultivation of this mindset has to continue throughout school years, encouraging informal and non-formal learning that carries over to lifelong learning. It is necessary to re-think these institutions from a lifelong learning perspective, as modelled by leading universities that clearly refer to lifelong learning in their mission statement and encourage faculty to incorporate goals such as fostering curiosity, and to include self-motivated learning strategies in their course design, teaching and themselves as lifelong learners and be appreciated as such. Accordingly, they should be given learning opportunities, both within a work setting and through dedicated training. Higher education institutions charged with training teachers and vocational education trainers should be supported to adopt a culture of lifelong learning and promote the equal value of academic, vocational and technical skills and certification.

Other important aspects for transforming educational institutions into institutions for lifelong learning include: (i) redesigning curricula (for example, in the case of universities, offering modular courses that complement full degree programmes, targeting learners beyond 18–25 year old students and offering intergenerational elements and 'lifelong learning' as part of curricula); (ii) assessing teaching practices in the formal sector and re-evaluating education goals (away from knowledge providers towards facilitators of knowledge creation and skills development); (iii) renewing the role of teachers; (iv) encouraging a self-understanding of how to manage the continuity of learning rather than how to manage classes (putting the focus on why to learn instead of what to learn); (v) increasing mobility for learners between formal and informal settings: this requires rethinking of certification, which should be understood as feedback for learning and teaching rather than the end point of learning; and (vi) supporting the integration of practical learning, especially for but not limited to vocational training through cooperation between institutions and industries.

The preconditions for such institutional changes are political will, adequate funding, the provision of infrastructure that creates networks of teachers, mentors and facilitators, and the linking of the systems they use to share effective practices and incorporate a lifelong learning perspective into their work.

	Relevance
Supporting employers to promote workplace-based learning opportunities	Urgency
	Now – 2025

It is crucial to recognize and revitalize workplace learning, including for the self-employed and in the informal economy, not only in terms of individual learning pathways but also in terms of supporting learning collectives and learning organizations.

Mentorship or peer-to-peer schemes transferring expertise between professionals and dedicated trainers should be fostered. Learning could be promoted by incorporating training into job specifications, with some time dedicated to learning. Special support should be given to digital and technological capacity-building for low-skilled workers. A centrepiece for imparting workplace-related skills would be a cooperative model that allows for constant interaction between training institutions and the relevant industry, bridging theory and practice. Training institutions could have 'visiting scholars' from the industry who would impart practical knowledge and gain academic expertise. Alternatively, vocational trainers and lecturers from universities could be temporarily attached to the industry to refresh their skills and share new insights. Moreover, supporting employers should promote the creation of workplace-related learning ecosystems and learning organizations. This includes evaluating needed and existing skills in the form of a skills audit. The results should be shared with training institutions to promote demand-driven learning activities. Furthermore, this should include deliberate training programmes and learning opportunities offered by employers, encouraging their employees to attend as part of their continuing professional development.

A national skills policy could support such workplace learning, especially in contexts with a large informal sector. Learning opportunities could be financed by employers, supported by fiscal incentives or by the learner with access to zero-rate lifelong learning loans. Additionally, 'lifelong learning funds', administered by universities and colleges and financed jointly by the government and industries, should be introduced to help individuals experiencing financial hardship to access training. To improve workplace-related learning, the processes for accreditation of teaching and learning programmes need to be simplified, and new or renewed certification is needed, especially for informally acquired skills.

Translating lifelong learning into governance and policies	Relevance
	Urgency
	Now

Framing education within a lifelong learning perspective challenges governments to reaffirm and re-define their educational mandate. A wide array of learning demands and needs, extended partnerships with learning providers and a multiplicity of stakeholders creates a complex landscape in which countries and states must locate themselves and define the scope of their actions. To coordinate the intersectoral network of learning more effectively and to ensure a demand-sided approach to planning education, the scope and mandate of education ministries should become that of 'lifelong learning ministries'.

The main responsibility of these lifelong learning ministries should be managing learning opportunities for the public and integrating them into the wider learning ecosystem, as well as supporting the collective development and maintenance of this ecosystem. To ensure a demand-sided perspective, the ministries' management and coordination functions should be linked to the lifelong learning navigation systems and the dialogue platform. The supported exchange would foster policy learning across countries and adaption to national and local contexts.

To translate lifelong learning into governance and policies, strong communicative efforts are needed. A conversation could be launched within the context of CONFINTEA VII preparatory work, discussing the role of the state and of all principal stakeholders and the basic principles framing a public educational mandate for lifelong learning. Furthermore, communication and awareness-building could be supported by cooperating with further actors and their communication activities. For example, as lifelong learning contributes to physical and mental wellbeing, it could be integrated into health promotion campaigns that understand learning as an intervention for health benefits.

for lifelong learning at all levels of governance to ensureUrgencylifelong learning as a human rightNow +		Relevance
		Urgency
		Now +

Further development of lifelong learning would gain from clarifying the legitimacy, scope, obligations and duty-bearers of a right to lifelong learning, distinguished from the current understanding of the right to education.

To enrich discussion on developing a legal foundation further, UNESCO could launch an open initiative to collect global contributions on how to define a human right to lifelong learning and the associated implications. Aspects to be considered would include: whether such a right to lifelong learning is implicitly or explicitly included in the existing normative documents and jurisprudence regarding the right to education; the implications of a demand-sided, learner-driven approach; the potential implications of adopting a collective, commons-based perspective; and implications for the role of the state. Moreover, further issues would need to be addressed, especially with regard to the commons approach and to a possible articulation with a universal basic income.

Such a philosophical and legal endeavour could be undertaken in preparation for the 75th anniversary of the proclamation of the right to education in 2023. As an intermediate step, CONFINTEA VII (2022) would provide an opportunity to take stock of Member State, expert and stakeholder considerations concerning a universal right to lifelong learning.

Annex 2: Participants in the consultation

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United Nations Educational, Scientific and Cultural Organization

> This report, a contribution to UNESCO's Futures of Education initiative, reflects on the potential contribution of lifelong learning both in transforming the field of education and in creating a more sustainable, healthy and inclusive future. Drawing on the insights of 12 distinguished experts from different disciplines and countries, the report presents a compelling vision for lifelong learning and the values and principles that must underpin it. It calls on the international community to acknowledge the social and private dimensions of education, and to recognize lifelong learning as a new human

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> right. Realizing this vision, it argues, requires adopting a transdisciplinary approach that can effectively grasp the complex, multidimensional nature of the challenges faced by humanity. The report outlines the main features of the 'enabling environment' needed to make lifelong learning the governing principle of education policy and to offer people opportunities to learn throughout life, whatever their background or context. It concludes with a set of key messages, complemented by specific action points and a discussion of selected policy measures.

