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Making lifelong learning a reality

A HANDBOOK

Education 2030

MAKING LIFELONG LEARNING A REALITY: A HANDBOOK

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The UNESCO Institute for Lifelong Learning (UIL) undertakes research, capacity-building, networking and publication on lifelong learning with a focus on adult and continuing education, literacy and non-formal basic education.
Its publications are a valuable resource for education researchers, planners, policy-makers and practitioners. While the programmes of UIL are established along the lines laid down by the General Conference of UNESCO, the publications of the Institute are issued under its sole responsibility.

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FOREWORD

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The complexities of modern life demand adaptability – populations that are resilient, open to change and willing to engage in learning throughout life. Increased mobility, population displacement, the climate crisis, technological change, threats to global health and democratic systems, and new patterns of production and consumption affect, in different ways, all countries in the world. Lifelong learning (LLL) represents an effective and potentially transformational means of addressing many of these challenges.

Increasingly, the global community is waking up to the fact that investing in learning throughout life – for everyone – fosters active citizenship, improves employability, promotes people's health and well-being, and makes communities more cohesive. In other words, it makes a major contribution to sustainable development across countries, regions and localities.

The value of LLL has become even more apparent as the global community tackles the profound, shared challenges of the COVID-19 pandemic, which, as well as precipitating an acute public health crisis, has disrupted education significantly. Governments, institutions, teachers and learners have had to adapt rapidly to restrictions to public life to ensure continuity of learning. Where more traditional learning programmes in classrooms have not been possible, online alternatives have sprung up. Non-formal and informal learning have come to the fore with a proliferation of more flexible online courses, new communication channels between education stakeholders and the opening up of digital resources.

LLL has the capacity to respond to trends and public policy issues requiring urgent attention from policy-makers. For example, LLL can address problems arising from rapid demographic changes and mass movements of people (see Singh, 2018), and can promote tolerance and democratic values in the face of deep social and economic changes. LLL also mitigates challenges posed by the digital revolution: as robotics, artificial intelligence and increased connectivity transform our world rapidly, demands for new skills for workers and different forms of citizenship emerge. These factors, among others, make LLL an economic,

political, social and environmental imperative for any country. It plays an important role in reducing social and economic inequalities and enhancing civic and community life. LLL can respond to the challenges of today and the decades ahead (UIL, 2020a).

Advancing the adoption of LLL means informing and sensitizing decision-makers actively, as well as developing national and local capacities. The UNESCO Institute for Lifelong Learning (UIL) supports Member States, at both the national and local level, to strengthen LLL in policies, plans and programmes. While many of UIL's activities target institutions, policy-makers and managers at the national level, the UNESCO Global Network of Learning Cities (GNLC), which is coordinated by UIL, supports the implementation of LLL at the local level. Trends observed in Member States at both levels reveal a steady upsurge in interest in LLL.

This handbook provides information, evidence and basic conceptual models to facilitate the adoption of LLL in national and local settings. It provides evidence from diverse initiatives and describes some of the contemporary issues to which LLL responds – including how it shapes the 2030 Agenda for Sustainable Development.

This handbook can be used by anyone tasked with or interested in the promotion and facilitation of LLL. It is designed to be particularly useful to national policy-makers. It can be followed sequentially or compartmentally to support LLL in a specific form or context. The handbook is structured in such a way as to guide the reader from the basics of LLL as a concept to the concrete implementation of LLL initiatives. Chapter 1 introduces LLL as an integrated policy for sustainable development, Chapter 2 provides guidance for the formulation of national LLL policies, Chapter 3 supports the design of national LLL implementation strategies that address contemporary issues and, finally, Chapter 4 moves to the local level and relates the guidance of previous chapters to the UNESCO learning city model. This handbook serves as a resource through which the ideals of LLL can be translated into LLL opportunities for all.

David Atchoarena, Director, UNESCO Institute for Lifelong Learning

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Thanks also go to the organizers and participants of the first consultative meeting to review the handbook in Shanghai, People's Republic of China, in 2018. East China Normal University (ECNU), as organizer of the meeting, provided the setting for a rich discussion to which the following individuals contributed: Ms Vu Thi Tu Anh, Mr Paul Bélanger, Mr Aaron Benavot, Mr Sergio Cárdenas, Mr Arne Carlsen, Mr Pedro Flores Crespo, Ms Kristiina Erkkilä, Mr Jose Enrique III Sandejas Garcia, Mr Min Han, Mr Soonghee Han, Mr Xiaotian Hu, Ms Jian Huang, Mr Ronghuai Huang, Mr Timothy Ireland, Ms Sunok Jo, Mr Rolf Lofstad, Mr Ehrens Mbamanovandu, Mr Ichiro Miyazawa, Mr Balázs Németh, Ms Emis Njeru, Mr Maurice Nkusi, Mr Villy Howard Pedersen, Ms Katarina Popović, Mr Rafaat Radwan, Mr Clinton Robinson, Mr Koh Tat Suan, Mr Abi Sujak, Ms Claudia Uribe, Ms Shirley Walters, Ms Wen Yuan, Mr Yeo Kak Yun and Mr Yanpeng Zhang. Their contributions helped shape the next iteration of the handbook.

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CHAPTER 1

Introducing lifelong learning: An integrated approach to sustainable development

GUIDING QUESTIONS

What are the core elements of UNESCO's understanding of LLL?

How does LLL contribute to the 2030 Agenda for Sustainable Development?

What are the major trends affecting the world, and how do they constitute arguments for the promotion of LLL?

INTRODUCING LIFELONG LEARNING: AN INTEGRATED APPROACH TO SUSTAINABLE DEVELOPMENT

This first chapter of the handbook presents LLL as an integrated policy to promote sustainable development. It starts by unpacking the fundamental features of LLL as a concept while establishing its significance for the United Nations' 2030 Agenda for Sustainable Development. The chapter then provides a series of arguments for the promotion of LLL – categorized according to major trends affecting the world – with the aim of providing policy-makers with an evidence-based rationale for placing LLL firmly on their national agendas.

Defining LLL

Lifelong learning is rooted in the integration of learning and living, covering learning activities for people of all ages, in all life-wide contexts and through a variety of modalities that, together, meet a range of learning needs and demands. This is the holistic understanding of LLL that frames the guidance contained within this handbook.

LLL has become an important concept in the arena of international and national education policy. The concept implies that an individual's life course can no longer be divided into a period of preparation followed by a period of action, rather that learning extends across the whole lifespan in different life phases. The concept also implies that learning takes place not only in formal schooling and training settings but also in diverse learning spaces, and that learning can be provided through a variety of means and pathways. This view affects individual approaches to learning and has implications for the development and implementation of education policies. Today, the view that learning is a lifelong and life-wide process – and that all education should follow this principle – is widely acknowledged by education planners and policy-makers.

Essential elements of LLL

While there are a number of valuable definitions of LLL that respond to different contexts (several of which are explored in this handbook), there are five elements that support a comprehensive understanding of the UNESCO definition of LLL.

All age groups. Lifelong learning is a process that starts at birth and extends across the whole lifespan. It provides people of all ages and origins (irrespective of age, sex, ethnicity, and national, economic or social origins, and including persons with disabilities, migrants, Indigenous peoples and other vulnerable communities) with learning opportunities and activities, responding to their specific needs in different life and professional stages.

All levels of education. Lifelong learning is about linking all levels and types of education, building adaptable pathways between them. This includes early childhood care and education (ECCE), primary and secondary school education, higher education, adult and non-formal education, and technical and vocational education and training (TVET).

All learning modalities. Lifelong learning recognizes all modalities of learning: formal (institutionalized, leading to recognized qualifications), non-formal (institutionalized, alternative or complementary to formal education, usually not leading to recognized qualifications) and informal (not institutionalized, on a self-directed, family-directed, community or socially directed basis).

All learning spheres and spaces. Schools are just one part of a wide learning universe, a space that also includes families, communities, workplaces, libraries, museums and other online and distance learning platforms. To promote lifelong learning is to build bridges between the formal education sector and non-formal and informal learning environments in order to create new opportunities for very diverse learning needs.

A variety of purposes. Lifelong learning is both people-centred and human rights-based. Its purpose is to provide people with opportunities to develop their capabilities and reach their potential throughout life, regardless of their starting points; to acknowledge a wide range of learning needs and demands; and to contribute to the development of an advanced economy and inclusive society. Providing equitable and inclusive lifelong learning opportunities means responding to the needs of diverse learners.

The term 'lifelong learning (LLL) policy' is used to refer to any kind of policy designed and implemented by governments and other stake-holders to create learning opportunities for all ages (children, young people, adults and older people, girls and boys, women and men), in all life-wide contexts (family, school, community, workplace and so on) and through a variety of modalities (formal, non-formal and informal).

Figure 1: Sustainable Development Goals

Source: United Nations, 2015

LLL and the Sustainable Development Goals

The growing prominence of LLL in education and social policy debates has been fuelled by the 2030 Agenda for Sustainable Development (UN, 2015). Adopted in 2015 by heads of state, government leaders and high-level UN and civil society representatives, the 2030 Agenda expresses a global undertaking to promote sustainability in all societies. Its 17 Sustainable Development Goals (SDGs) and 169 associated targets address shared challenges at the global, national and local level.

SDG 4 enjoins countries to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (ibid., p. 14), giving LLL a central role in the development of education policies for sustainable development. The Education 2030 Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4 stresses the need to embed learning opportunities for all ages in the education system and to provide 'multiple and flexible learning pathways and entry points and re-entry points at all ages and all educational levels, strengthened links between formal and non-formal structures, and recognition, validation and accreditation of the knowledge, skills and competencies acquired through non-formal and informal learning' (UNESCO, 2016, p. 33).

By emphasizing the development of sound and transformative policies based on evidence and inclusive dialogue, SDG 4 draws on – and goes significantly beyond – previous international commitments to LLL and education. It prioritizes early childhood, universal completion of primary and secondary education, equal access to post-secondary education, and promotes the inclusion of marginalized populations. It focuses on relevant learning outcomes, including foundational skills and competences for rapidly shifting labour markets, and highlights knowledge, values and skills that foster gender equality, global citizenship and environmental protection. It also demands that all citizens, youth, women and men have opportunities to achieve literacy and numeracy by 2030.

SDG 4 has been formulated from a LLL perspective. Its first two targets (4.1 and 4.2) are dedicated to primary education for children, while learning

opportunities for youth and adults feature in five of the 10 targets: 4.3 (access to technical and vocational education and training [TVET] and tertiary education); 4.4 (skills acquisition for employment, decent jobs and entrepreneurship); 4.5 (elimination of gender disparities); 4.6 (literacy and numeracy acquisition); and 4.7 (knowledge and skills acquisition for sustainable development). Returning to the UNESCO definition of LLL, SDG 4 addresses different age groups, education levels, learning modalities, spheres and purposes.

Beyond SDG 4, LLL is a main driver of sustainable development and therefore crucial for achieving all of the 17 SDGs. Sustainable development is tied to issues of education (SDG 4), gender (SDG 5), and – more than ever before – health (SDG 3). LLL addresses all three goals (English and Carlsen, 2019). Moreover, the intersectoral characteristics of LLL can even strengthen the links between SDG 4 and other SDGs, thus helping to ensure high-quality development on a wider scale (ISCU and ISSC, 2015).

The goals and targets of the 2030 Agenda are intended to represent an integrated policy response to urgent challenges. This means that the key dimensions of sustainable development – economic, social, cultural and environmental – must be considered holistically, as interconnected parts of equal importance. Failure to progress in one area of the agenda will hamper progress in the others. The capacity of LLL to build bridges between different types and levels of education and learning, between different actors and institutions, and, crucially, between different life spheres and policy contexts therefore becomes particularly relevant.

Although national governments signed up to the goals, there was no question that implementation would require the backing of the government entities closest to the people – that is, local government. It was clear, too, that lifelong learning had a central role to play in helping citizens to understand and embrace the achievement of the SDGs. The UNESCO learning city initiative was therefore developed in response to these requisites and will be further explored in Chapter 4.

Why LLL should be promoted

Emerging economic, technological, environmental and social changes signal the need to foster adaptation, creativity and, most importantly, learning that continues throughout life. People can no longer navigate their life course using only the skills and knowledge acquired at school, college or university.

As we will see in Chapter 2, a number of countries have already put LLL at the heart of national policies for economic and social transformation as they strive to become learning societies. Policies implemented in different regions of the world confirm that LLL is being embraced as a key guiding principle for articulation in education, social and labour market policies at national and local levels. This serves as an acknowledgement by countries that LLL has a multitude of benefits and can contribute to improved living environments, better health and well-being, more cohesive communities, enhanced civic engagement, and better employment opportunities. Schuller et al. (2004) point to social outcomes in particular, identifying the positive influence of learning on human and social capital and the benefits of these outcomes on the individual and their community.

To demonstrate the great value of LLL, this section makes the case for its promotion using six major trends affecting the world today. In each instance, the trend is defined and an overview of related opportunities as well as current and potential consequences is given. The role of LLL is then highlighted with a focus on its benefits, which, across all trends, include the cultivation of adaptability and creativity among populations.

Developments in digital technologies

Notably in the past decade, mobile technology has become increasingly multifunctional, portable and affordable, opening new opportunities for learning in formal, non-formal and informal settings, especially in communities that previously had limited opportunities to access and use technology (UNESCO, 2022). Concurrently, new technologies – such as automation, artificial intelligence (AI), the internet of things and blockchain – are significantly changing the skills and competences needed

for existing jobs; causing routine, low-skilled occupations to disappear; and resulting in the creation of new jobs and industries (ILO, 2021). The networked nature of modern technology, combined with AI, is also changing our interactions, communications, media and entertainment in ways that profoundly shape our ways of being (Poquet and de Laat, 2021).

Through its indicators and implementation strategies, SDG 4 explicitly recognizes the role of technology in all forms of education and learning. Target 4.4 specifically measures the proportion of youth and adults with information and communications technology (ICT) skills, recognizing it as a major component of the skills needed for employment, decent jobs and entrepreneurship. Developing ICT skills, including digital literacy, enables learners take full advantage of digital devices, the internet, and online resources for learning opportunities (UNESCO, 2020). These opportunities include, among others, using mobile technologies for basic literacy, obtaining tertiary qualifications online and at distance, utilizing virtual and augmented reality for safer and more effective vocational education and training (UNESCO and UNESCO Bangkok, 2017), and combining big data with machine learning algorithms to guide adults enrolled in work-relevant skills courses and offer career guidance.

At the same time, widespread differences in digital infrastructure and digital skills globally point to a significant 'digital divide' among and within countries. At the end of 2019, the International Telecommunication Union (ITU), a specialized agency of the United Nations responsible for matters related to ICT, estimated that 49 per cent of the world's population still did not have access to the internet (ITU, 2022). Differences in ownership and use of mobile phones also exist between genders: women are 7 per cent less likely than men to own a mobile phone and 15 per cent less likely to use mobile internet (GSMA, 2021). The Digital Economy and Society Index (DESI), which summarizes indicators on Europe's digital performance and tracks the progress of EU countries, shows that 40 per cent of adults lack basic digital skills (European Commission, 2021). Among youth and adults from the most vulnerable groups, such as refugees, internally displaced persons (IDPs) and migrants, technological access and literacy data suggest that they

suffer from multiple intersecting disadvantages that limit learning opportunities offered through the internet and digital technology (UIL, forthcoming).

Technology has also prompted ethical, governance and privacy concerns. Advanced technologies such as AI algorithms have unambiguously been shown to exacerbate bias, perpetuate gender stereotypes and impact negatively on other aspects of work, such as on hiring and income (EQUALS and UNESCO, 2019). Increased use of digital technologies has also led to accumulation of education data by a small number of global corporations that could be used for unanticipated commercial purposes, and for which consent was never sought or provided (UNESCO, 2020). These concerns suggest that appropriate safeguards and boundaries should be developed around values of collective community engagement and open and free software development (ibid.). A recently issued draft of the UNESCO Recommendation on the Ethics of Artificial Intelligence (UNESCO, 2021) highlights the ethical implications of AI for education because 'living in digitalizing societies requires new educational practices, the need for ethical reflection, critical thinking, responsible design practices, and new skills, given the implications for the labour market and employability' (ibid., p. 5).

Policies and regulations play a critical role in guaranteeing inclusion in the design, implementation, use and outcomes of using ICT in LLL. The need for such initiatives has never been more pronounced. The COVID-19 pandemic upended traditional educational provision and workplace activity, forcing whole industries and sectors of the education system to shift their operations online. As a result, the integration of ICT has significantly increased across many of these sectors, illuminating the digital inequalities that reflect existing social inequalities across class, gender, race and age, among others, in the process. Governments are responsible for addressing these challenges and mapping out ICT in line with national priorities, which can also take place at the regional level as seen in the example in *Box 1.1*. Section 3.5 of Chapter 3 also focuses on the advancement of ICT for LLL implementation, with a particular emphasis on inclusion, and features many examples to illustrate the issues raised here.

LLL IN PRACTICE

Box 1.1. — Digital transformation in Africa

The African Union is encouraging a process of regional and national digitalization through its *Digital Transformation Strategy for Africa (2020–2030)*. The stated overall objective for the strategy is 'to harness digital technologies and innovation to transform African societies and economies to promote Africa's integration, generate inclusive economic growth, stimulate job creation, break the digital divide, and eradicate poverty for the continent's socio-economic development and ensure Africa's ownership of modern tools of digital management' (AU, 2020, p. 2).

The strategy is supported by the World Bank's Digital Economy Initiative for Africa (DE4A) (World Bank, 2022), which aims to engender policy reform, interventions and investments in the digital economy across Africa. At the international level, the initiative promotes the interconnectedness of digital markets while stimulating growth in digital infrastructure, skills, financial services, business and entrepreneurship at the national level. So far, country diagnostics have been carried out in a number of African countries to shape implementation as the initiative progresses.

Transformations in the world of work

In the context of rapid and broad labour market transformation, the workplace is increasingly becoming a learning space. There is a growing demand for advanced skills, creativity and adaptability in the workplace; however, the pace and nature of technological changes – in the form of AI and automation – make it difficult to predict what skills will be needed in the future while also necessitating the development of national LLL agendas.

The COVID-19 crisis resulted in considerable job losses and increased labour market inequality: women experienced a greater loss of employment than men, and lower-skilled workers were particularly exposed to job loss, notably in the informal economy. With technology developing rapidly, the likely impact on national economic systems is hard to predict; however, it is anticipated that workers will move between jobs more often and be subject to role changes that require constant upskilling or retraining.

Automation is also affecting the world of work with increasing intensity: while an estimated 3 per cent of jobs were at risk of automation in the early 2020s, this could increase to 30 per cent by the mid-2030s (PwC, 2022). Furthermore, due to demographic changes, people will remain in the workforce longer and an increasing proportion of the future workforce will be made up of those already in employment. While the planet is ageing, some regions, notably sub-Saharan Africa and the Caribbean, continue to experience major challenges to train and absorb into the labour market a fast-growing youth population. Workers are thus likely to experience non-linear transitions between the labour market and education, returning to education to prepare for a career change or participating in learning programmes while working.

Unemployment and underemployment continue to represent major concerns for policy-makers. The International Labour Organization (ILO) reported a global youth unemployment rate of 13.6 per cent for 2019, or 67.6 million young people unemployed (ILO, 2020). In 2020, with the outbreak of COVID-19 and the subsequent restrictions on movement to minimize its spread, unemployment rose sharply and there was a huge loss of working hours as well as income. ILO estimated that, over the course of 2020, 8.8 per cent of all working hours – or 255 million full-time jobs – were lost around the world, with a global reduction of employment affecting 114 million people (ILO, 2021a).

Even before the COVID-19 pandemic, millions of young people around the world were trapped in a cycle of unemployment and informal, unpaid or low-paid work, yet education and LLL can – with effective policy-making and planning – positively impact their chances in the

labour market by providing them with relevant skills (Hutchinson and Kettlewell, 2015). While unemployment has long-term negative effects on individuals' well-being, and implications for welfare costs to society, LLL policies targeting labour-market activation and skills enhancement can help to tackle unemployment and its psychological impacts (Mousteri, Daly and Delaney, 2018).

While the discourse on the fourth industrial revolution (sometimes referred to as Industry 4.0) concerns mostly cities and their peripheries, in many rural areas, agriculture continues to provide a major source of income. Providing employment opportunities for young people and reducing rural poverty are important concerns. This requires anticipation of how work in rural areas is changing, particularly as a result of climate change. Adapting to this change requires massive innovation in existing agricultural practices and the development of new skills and knowledge through vocational education programmes and training opportunities.

Hence, both urban and rural areas are witnessing rapid and structural transformations shaped by technology and climate change, requiring new skilling models.

New technologies, demographic shifts and climate change are transforming jobs and labour market participation patterns. Establishing a culture of LLL at and for work is an imperative to adapt the workforce to new job requirements, to build more inclusive and just societies, and to promote personal fulfilment and development.

Demographic changes

Globally, people are living longer, there are fewer young people entering the labour market and the age profile of the population is becoming progressively older. According to estimates from the United Nations, the global population of people aged 65 or older numbered 727 million in 2020 (UN DESA, Population Division, 2020) and, by 2050, older people will outnumber youth (UN, 2022). People are working longer and the retirement age in many countries is being delayed. Among ageing populations

where individuals remain active in the labour market for longer, there is a growing demand for upskilling and reskilling opportunities.

Demographic change also results from the forced displacement of large numbers of people because of conflict or natural disaster. The conflict in the Syrian Arab Republic, for example, has led to more than 6.1 million internally displaced people (IDMC, 2019), while the political, economic and social crisis in the Bolivarian Republic of Venezuela has resulted in the migration of over 4.8 million people (UNHCR, 2020). Destination countries are challenged to quickly develop strategies to recognize and accredit formal and non-formal learning, skills and competences that refugees bring with them and to offer targeted learning programmes to support refugees' integration into the national education system or labour market.

In recent years, a number of countries have put legislation in place for the integration of refugees (see UNESCO, 2018). Ethiopia's Refugee Proclamation gives refugees access to schools, asserting that 'every recognized refugee or asylum-seeker shall receive the same treatment as accorded to Ethiopian nationals with respect to access to pre-primary and primary education' and that refugees are entitled to 'the recognition of foreign school certificates, diplomas and degrees' (Federal Democratic Republic of Ethiopia, 2019, p. 16). In the Islamic Republic of Iran, a decree issued in 2015 by the head of state supported the acceptance of Afghan children to schools, even in the absence of proper documentation. This was followed in 2016 by government measures to support refugees, including a new educational support card for Afghan children without documentation (Hervé, 2018).

While these are positive examples, it is worth noting that, in many parts of the world, refugees still suffer from a tragic lack of educational opportunities. The benefits of improving this situation are clear: LLL can break down cultural and linguistic barriers, support informed, intelligent debate about migration flows, and create pathways to further learning. In addition, participation in LLL has been found to help citizens become more active in civil society and political life, more tolerant of diversity, and more aware of social and political issues. LLL promotes social cohesion and cultural understanding, and supports the creation of learning communities at a

local level that can address challenges such as low literacy levels, inter-generational poverty and environmental sustainability. Indeed, learning communities can offer a means of managing and resolving conflict through mediation and dialogue, raising awareness about the causes of socio-economic issues and shaping public attitudes (UNESCO, 2018). Moreover, because LLL aims at creating learning opportunities for very different populations during different stages of their lives, it can be an effective response to demographic change. For example, LLL policies which consider the learning needs of older workers can support them in keeping up with new technological developments to encourage their continued participation in the labour market, which is often associated with wider sociocultural benefits.

The urgency resulting from climate change

Climate change, and the need for climate action, are issues which are rapidly rising to the top of policy-makers' agendas. The world's climate system has been destabilized by human activity, and countries around the world are now witnessing floods, heatwaves, droughts and other types of extreme weather. These developments are made clear in the most recent report of the Intergovernmental Panel on Climate Change's (IPCC) Working Group, which forecasts that such events will increase both in regularity and intensity, leading to potentially irreversible sea-level rises (IPCC, 2021). This latest report follows findings in 2020 that pollution of the atmosphere by greenhouse gases, loss of sea ice due to rising temperatures, and flooding caused by heavy rain all continue unabated (WMO, 2020). It is now inevitable that all parts of the world will be affected by climate-related disruption in the years to come – more acutely so in the Global South – so it is imperative that populations learn to adapt to these changes.

Here once again, LLL has a central role to play, firstly in terms of knowledge. Through learning opportunities accessible to all – no matter their age, nationality, education level, socio-economic background or ethnicity – populations can become sensitized to the ways in which the climate is changing, and the consequences being brought to bear

at the international, national and local level. Secondly, LLL fosters resilience in response to climate change. While the trends and many of their expected consequences are clear, we do not yet know all the ways in which climate change will affect the way we live, and there are some consequences which are not yet knowable. A global population of resilient lifelong learners, who can identify and evaluate changes in their environment, formulate responses and find solutions to emerging issues, will be needed in the years ahead.

Policy-makers can foster this resilience at the local level by developing programmes to increase civic engagement. Climate-related learning opportunities can empower people to address the challenges posed by climate change in their localities and to find ways to manage their own resources sustainably. They may also lead to initiatives to raise awareness of the challenges brought by climate change, thereby enabling people to make better decisions compatible with sustainable development. This is important at every level of education, and it is a government responsibility to ensure that people are informed about the effects of climate change, its impact on food security, and how to promote the sustainable use of resources. Such information increases the likelihood that public debates on these topics will be fair, constructive and evidence-based.

At the same time, governments must create conditions conducive to actions at the grassroots level in response to climate change, as well as the creation of cross-sectoral partnerships. Resource mobilization by civil society organizations, learning institutions, communities and businesses can contribute significantly to climate action at the local level, as can collective initiatives such as the study circle, the learning neighbourhood and the learning city.

LLL IN PRACTICE

Box 1.2. — How Cape Town faced its severe water crisis

In 2017, Cape Town, South Africa, which then had a population of 3.7 million people, experienced its worst drought in over a century. This changed the way the citizens of Cape Town think about water and how it can be managed. LLL was fundamental in helping people of all ages respond to the crisis. For example, a drive led by city water officials equipped citizens with strategies to halve their water usage: this included taking shorter showers, only flushing the toilet when absolutely necessary, washing clothing less frequently, not watering the garden and collecting clean water at natural springs in the area. In addition, a strict limit of 50 litres of water from municipal supplies per person per day was introduced and grey-water systems were installed along with large water tanks for those who could afford them. The drought required the collective efforts of all sectors and from all levels of society to produce innovative and realistic solutions so that people could get by with less water and reinforce their hope for a sustainable future. LLL took place in various sections of society through initial education, adult learning and education, and other learning environments, such as the media, faith-based organizations and civil society.

Source: Walters, 2018

Health and well-being

The COVID-19 crisis has pushed health and well-being to the top of policy-makers' agendas by revealing the cross-sectoral impact of health issues on education, society and the economy. Even before the pandemic, the benefits of education and health for individual life opportunities and for society were widely known, as was the strong, mutually reinforcing relationship between education and health, where improvement in one has clear positive impacts on the other.

Participation in learning leads to improved health behaviours and attitudes, higher life expectancy and a reduction in lifestyle diseases, with a commensurate reduction in healthcare costs (UIL, 2016). New evidence of these effects is included in the fourth *Global Report on Adult Learning and Education (GRALE 4)*, which found that adult education also has health-related advantages for families, as in the case of mothers who participate in literacy programmes that benefit their children's health (UIL, 2019).

The community is also an essential setting for the dissemination of information on health, hygiene and related services, as demonstrated by early efforts at local level to raise awareness about COVID-19 and prevent its spread. Learning in general – and non-formal and informal learning in particular – contribute to the improved health of individuals within communities. The World Health Organization's 'Health 2020' initiative pointed to the creation of new learning environments that foster not only the cognitive development of the individual but also their social, physical, mental and emotional development. Furthermore, with a focus on social and emotional learning for learners' self-esteem, community-based learning for health and well-being can encourage more active citizenship as well as inclusion (WHO, 2015).

Throughout the pandemic, which has threatened health and well-being in many ways, the benefits of LLL have been self-evident. As a direct response to the impact of COVID-19 on physical health, innovative LLL programmes for the promotion of hygiene and social distancing have highlighted the great value of informal learning through internet information campaigns, TV and public posters. Furthermore, universities, libraries and other organizations have made their educational resources free to use online. This has served to promote LLL opportunities at home during periods of restricted public activity. In terms of mental health and well-being, some universities have developed resources for people struggling to cope with the psychological impact of the pandemic.[1]

1 For more examples of how universities have supported local communities in terms of health and well-being during the COVID-19 pandemic, see the recent UNESCO Education Sector issue note on higher education institutions' engagement with the community, which is available at: https://unesdoc.unesco.org/ark:/48223/pf0000374128 [Accessed 1 February 2022].

LLL for health and well-being has emerged as an important paradigm for the pandemic period and post-pandemic recovery. Recent events will continue to shape LLL policies and practices in the years to come, particularly with regard to two dimensions which policy-makers should consider. Firstly, learning for health equips individuals with the capacity to look after their own health and the health of their family. This relies on LLL opportunities for health literacy so that people can gain, critically evaluate and apply information to use in everyday health-related decision-making, thus contributing to their own health promotion (Jourdan et al., 2021). Secondly, learning for health can be considered a core dimension of citizenship education. This means recognizing the impact of citizens' actions on the collective health of the community (Jourdan and Gray, 2021).

Strengthening citizenship

The world today faces unprecedented social, economic and environmental challenges that are driven by accelerating globalization and technological development. These newly emerging issues affect all aspects of society and have far-reaching repercussions. This includes, for instance, the spread of disinformation, which has led some people to deny climate and vaccine science or the root causes of poverty and migration flows, among other things. These fake news campaigns can result in citizens' active resistance to policies and actions intended to address the very challenges that the world is experiencing. They can also instil and perpetuate populist political environments.

Over the last two decades, nationalist movements have gained traction in different countries around the world, motivated by exclusionary tendencies that foster division, chaos and even violence. The overwhelming COVID-19 pandemic, coupled with the urgency of climate change and the current rise of populist movements, have reminded us that learning is paramount in times such as this, and equipping citizens with sufficient knowledge and information to respond to these issues is key. National as well as local governments play an important role in this effort.

The four areas of sustainable development – economic growth, social inclusion, cultural expression and environmental protection – rely on the contributions of informed and active citizens. According to UNESCO's definition, global citizenship is 'a sense of belonging to a broader community and common humanity' (UNESCO, 2015, p. 14). This global perspective empowers learners to 'engage and assume active roles, both locally and globally, to face and resolve global challenges and ultimately to become proactive contributors to a more just, peaceful, tolerant, inclusive, secure and sustainable world' (UNESCO, 2014, p. 15).

In a reference framework entitled *Key Competences for Lifelong Learning*, published by the European Commission (2019), citizenship competence is articulated as involving an understanding of common social values and a differentiated view of major historical developments at local, national and global levels. It further refers to critical thinking, problem-solving skills, and an involvement in civic activities and decision-making at all levels of government. Global and active citizenship builds fundamentally on the respect for human rights and includes 'support for social and cultural diversity, gender equality and social cohesion, sustainable lifestyles, promotion of culture of peace and non-violence, a readiness to respect the privacy of others, and to take responsibility for the environment' (ibid., p. 12).

To enhance people's knowledge, skills and attitudes for becoming active citizens, citizenship education takes a multifaceted approach, including human rights education, peace education, education for sustainable development (ESD), and education for international understanding. It applies a LLL perspective, beginning from early childhood and continuing through all levels of education and into adulthood, including both formal and informal approaches, curricular and extracurricular interventions, and conventional and unconventional pathways to participation (UNESCO, 2015, p. 15). While focus has been given to citizenship education in schools and formal education, further efforts are needed to raise awareness and enhance competences for active and global citizenship among youth and adults.

LLL IN PRACTICE

Box 1.3. — Strengthening citizenship in learning cities

Good practices for strengthening citizenship education at the local level can be found among the members of the UNESCO Global Network of Learning Cities' (GNLC) thematic cluster on citizenship education. A survey conducted in 2019 showed a richness and variety of initiatives taken by cluster members to promote active citizenship. The results demonstrated that a wide range of stakeholders contribute to citizenship education, including municipal governments, foundations and associations, schools and universities, training institutes, community centres, libraries and social clubs.

The city of Yeonsu-gu in the Republic of Korea has implemented several citizenship projects to enhance civic engagement, build community resilience and foster direct democracy. An 'online multi-family housing management platform' supports the exchange of information across local communities and enables citizens' direct participation in decision-making processes at the local level regardless of time and space. Also in the Republic of Korea, the city of Bucheon uses liberal arts to foster active citizenship. The arts are used as a vehicle for increasing critical awareness among citizens, involving, for example, a poetry contest oriented towards global citizenship.

To foster social inclusion, the Brazilian City of Contagem promotes education and non-discrimination. For example, through the School with No Borders project, initiated in 2015, Portuguese language classes are offered to immigrants, including individualized assistance for immigrant elementary students and their parents, easing communication between the school and the family.

Source: UIL et al., 2021

Building a rationale for LLL policy

Chapter 1 introduced some of the emerging challenges any society will face in the coming decades, and how these challenges create a context where flexible and comprehensive LLL policy is needed. By presenting fundamental global changes in technology, employment, demography, the climate, health needs and civic engagement – and how these changes affect learning – this chapter supports the process of building a rationale for LLL.

While international development frameworks in most countries recognize the importance of LLL, its full implementation remains an aspiration. In many regions, LLL remains at the margins of national policies, and many countries still confine the term to adult education, non-formal education or continuing education. This tendency neglects the holistic value of LLL and its benefits across diverse areas of life (Yang and Valdés-Cotera, 2011). As demonstrated in Chapter 1, LLL is highly relevant to present and future challenges and, has potential positive effects on all individuals and on underserved populations in particular. As a result, an increasing number of countries are now recognizing LLL as a comprehensive policy issue, cutting across different levels of education and learning contexts. Nevertheless, more progress is needed in LLL policy development around the world.

The first step is to build rationale, place LLL firmly on national policy agendas, and identify public policy issues where the adoption of LLL has significant comparative advantages. With this fundamental argument for LLL and its benefits established, the policy-making process can proceed with purpose.

IN YOUR CONTEXT

LLL as an integrated approach to sustainable development

In light of complex issues emerging around the world, Chapter 1 looked at the relevance of lifelong learning. By defining why the concept of LLL should be promoted as a concrete reality that can address some of our greatest challenges, the chapter provides guidance that policy-makers can use to advance the adoption of LLL policies in their education systems.

Before proceeding to Chapter 2, which is designed to inform readers how to promote policy-making from a LLL perspective, it is important to reflect on how the information presented here relates to your own national context. While much of Chapter 1 is universally applicable, certain aspects will have particular relevance to your country. Please consider the following points, questions and possible actions:

Key points:

- The issues emerging in countries around the world are varied, and there are many that are unique to particular national contexts, but the most pressing challenges pertain broadly to technology, employment, demography, climate, health and citizenship.
- As these issues are rapidly emerging, their impacts are not yet fully known; it is therefore necessary to respond to the current situation while anticipating the needs of future generations.
- This simultaneously present- and future-oriented task requires the identification of public policy issues. Because LLL is relevant to a wide range of societal issues, such as health, environment, work, justice, citizenship, culture, social affairs, etc., it is uniquely positioned to respond to issues in a manner that recognizes how they interconnect.

Questions for reflection:

- How is LLL conceived in your country? Is there an official definition? If so, to what extent does it reflect this chapter's key points?
- Does your country have a national plan or strategy for the achievement of the 17 Sustainable Development Goals? If so, how does LLL contribute?
- Do any of the emerging issues mentioned in Chapter 1 resonate particularly in your national context?

IN YOUR CONTEXT

Possible actions:

To identify how LLL for sustainable development relates directly to your context, try this step-by-step activity before moving on to the next chapter.

- Start by pinpointing issues of particular importance to your national context at the present time, as well as those that might emerge in the coming years. Think about how they relate to the trends introduced in Chapter 1; for example, changes affecting demography, technology and/or climate.

- Reflect on which areas of life these challenges impact the most; for instance, employment, health and/or environmental conservation.

- Look ahead and consider what LLL initiatives or policy interventions might help to address the issues you have identified.

- Identify the modality/modalities of learning that may apply (formal/non-formal/informal) to design and implement LLL initiatives that address the problems you identified.

Essential reading

UIL. 2020. *Embracing a culture of lifelong learning. Contribution to the Futures of Education initiative. Report. A transdisciplinary expert consultation*. [PDF] Hamburg, UIL. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000374112 [Accessed 11 January 2021].

UNESCO. 2016. *Education 2030. Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all*. [PDF] Paris, UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000245656/PDF/245656eng.pdf.multi [Accessed 2 February 2022].

Further reading

ILO (International Labour Organization). 2019. *Work for a brighter future. Global Commission on the Future of Work*. [online] Geneva, ILO. Available at: http://www.ilo.org/global/topics/future-of-work/publications/WCMS_662410/lang--en/index.htm [Accessed 20 April 2020].

UIL. 2016. *Recommendation on adult learning and education 2015*. [PDF] Hamburg, UIL. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000245179 [Accessed 2 February 2022].

UN (United Nations). 2015. *Transforming our world: The 2030 Agenda for Sustainable Development. A/RES/70/1. Resolution adopted by the General Assembly on 25 September 2015*. [online] New York, UN. Available at: https://sustainabledevelopment.un.org/post2015/transformingourworld [Accessed 21 April 2020].

UNESCO. 2020. *Outcome document: First draft of the Recommendation on the Ethics of Artificial Intelligence*. [PDF] Paris, UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000373434 [Accessed 15 March 2021].

CHAPTER 2

Creating effective lifelong learning policy

GUIDING QUESTIONS

What is LLL policy?

What does the LLL policy-making process look like?

Which key factors need to be considered to create effective LLL policy?

CREATING EFFECTIVE LIFELONG LEARNING POLICY

With the rationale for LLL established in Chapter 1, this chapter shifts focus to LLL policy. Starting with a definition of LLL policy, its common characteristics and an overview of the LLL policy-making process, the chapter then explores several factors for creating effective LLL policy. Specific emphasis is placed on the need for LLL policy to cut across sectors and include a wide range of policy agendas and potential impacts.

Any policy represents a system of principles or directions agreed upon by stakeholders to guide actions and decisions across different fields of societal activity. While each policy ideally expresses the intentions, goals and priorities determined by governments and other organizations, the process through which the policy is developed is complex and subject to a range of direct and indirect influences.

LLL policy design is frequently considered a prerogative of government authorities. However, as LLL takes place across sectors, agencies and the human lifespan, it can fall within the responsibility of different ministries and authorities at different levels, corresponding to a wide range of policy and political agendas. Hence, any LLL policy-making is participatory by design, demanding the adoption of a particular systemic and cross-sectoral approach. In addition, targeted populations for LLL policy may vary significantly. These considerations of participatory, cross-sectoral policy-making and diverse target populations are characteristic of LLL policy and important to bear in mind when proceeding through the chapter.

Defining LLL policy and the policy-making process

LLL policy denotes an amalgamation of documents and processes – including legislation, policies, strategies and action plans – that explicitly contribute to a nationwide promotion of LLL.

LLL policy should be research-driven and evidence-based. The policy-making process should therefore be informed by contextual analysis, involving a review of existing legislation, policies, strategies and action plans pertaining to LLL, as well as relevant research. The contextual analysis should also map out demographic trends, social conditions, economic conditions, characteristics of the education system, the status of equity and inclusion (particularly with regard to women and vulnerable populations), and the interaction of all these factors.

LLL policy can be developed in different forms: by integrating a LLL perspective into sectoral policies or by developing a distinct, comprehensive LLL policy that cuts across different sectors. Sectoral policies developed from a LLL perspective are typically under the responsibility of a particular ministry (e.g. education, labour, social affairs) but may extend beyond that sector. Integrating a LLL perspective into sectoral policies means defining the skills and knowledge needed to achieve sectoral goals and defining how these can be developed through LLL among different groups in society. Measures included in sectoral policies with a LLL perspective may also facilitate pathways into and from other sectors (e.g. a labour policy supportive of non-linear transitions between work and education).

LLL policy also includes the development of a comprehensive LLL policy document or strategy, which typically cuts across different (sub)sectors. It may be under the joint responsibility of several ministries or under the direct responsibility of the head of government (president, prime minister or equivalent). It should be guided by a shared vision and aligned with the overarching development goals of the country. This policy may serve as a statement for the national promotion of LLL, as well as a unifying document for diverse lifelong learning policies and initiatives that already exist in the country. This policy often refers to governance and financing arrangements and, though it might not provide an exhaustive account of learning initiatives across the country, it can bring cohesion to the national effort to promote LLL.

A LLL implementation strategy or action plan is often included in or directly follows the comprehensive LLL policy or strategy. Here, the key

areas and topics for LLL implementation are specified with associated objectives, targets and indicators. The implementation strategy or action plan also details the LLL programmes to be designed, with stakeholder involvement, financing, resource mobilization and a timeline indicated.

LLL IN PRACTICE

Box 2.1. — A national policy framework from a lifelong learning perspective in Colombia

Colombia provides a good example of designing an integrated public policy, in this case for early childhood care and education (ECCE). De Cero a Siempre ('From zero to forever') promotes the comprehensive development of children from birth until the age of six. Policy implementation follows an integrated approach, including the coordination of different sectors (the ministries of education, health and culture, and the Colombian Institute of Family Welfare) and stakeholders such as families, communities, civil society, academia, the private sector and NGOs. In addition, the policy involves territorial coordination at national, departmental and municipal levels.

In recognizing the role of families in child development, De Cero a Siempre has developed strategies to change patterns and practices of child-rearing by training families. The programme has trained almost 11,000 tutors, who, in turn, have trained more than 150,000 families, improving the care of young children as a result.

Another strategy includes the creation of reading rooms: cosy and friendly spaces designed to promote reading, literature and language development. Since 2013, over 300 of these freely accessible and inclusive spaces have been established in 145 municipalities across Colombia through public–private alliances.

Sources: High Counselling for Special Programs, Office of the President, Republic of Colombia, 2013, 2018

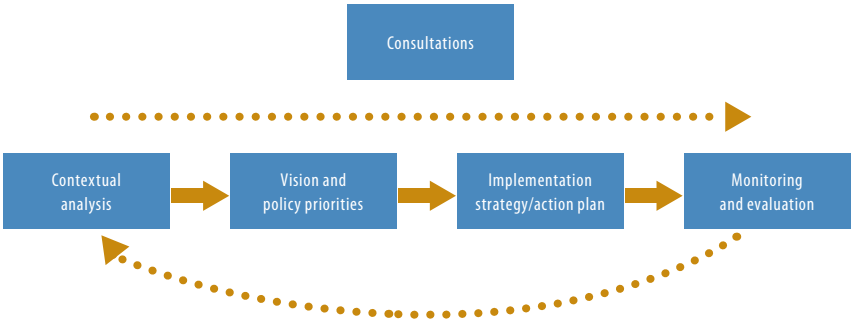
To ensure progress in the implementation of LLL policies, a monitoring and evaluation (M&E) framework is needed. Such a framework defines the mechanisms and responsibilities for M&E and should include indicators for tracking targets. Given the breadth of LLL policy, the M&E framework may address the quality, quantity and/or equality of learning opportunities, building on existing data collection and monitoring activities, and leading to periodic reports on progress in LLL.

The entire LLL policy-making process is shaped by consultations with diverse groups of stakeholders such as government ministries, local leaders, institutions, representatives of the private sector, community groups, civil society organizations and learners themselves. This process should be continuous (used to refine all stages of the process) and deep (meaningful involvement rather than approval-seeking).

Based on this broad definition, several core components of LLL policy can be identified as a sequence (see *Figure 2.1*).

The core components in this sequence are broadly defined in order to apply to complex LLL policies across diverse contexts. They should be reflected in any LLL policy-making process and relate to a number of key factors for effective LLL policy.

Figure 2.1. Core components of lifelong learning policy



Source: Elaborated by authors

Key factors in LLL policy-making

There are several key factors to consider throughout the LLL policy-making process. They are presented in detail in this section.

Aligning LLL with national and local contexts

Contextual factors are critical in formulating national LLL policies, since these policies must explicitly relate to national development priorities and ensure coherence with other related government and public strategies. Analysis must therefore be used to enhance the design and implementation of contextually sensitive LLL interventions, identifying overall parameters and potential orientations for LLL policies. A more fine-grained analysis at provincial, local and community levels will also yield insights into the kinds of interventions that are likely to result in viable, relevant and accessible learning opportunities for learners of all ages and circumstances. This contextual analysis should identify problems and the type of beneficiaries the LLL policy is intended to support and should consider how the LLL policy will be implemented. The following factors should be examined:

Demographic trends, since these provide information on the size of different social groups which may need specific types of educational opportunities. National census data, organized by age, gender, household and location, constitute the main source of information, supplemented by other sources pertaining to migration.

Characteristics of educational systems, since LLL policies must take full account of the prevailing educational situation in a country. Any policy or educational development should be based on a systematic and in-depth analysis of the realities and challenges using data available from education management information systems (EMIS). Analysed figures should provide an important foundation for the design of LLL policies aiming to respond to the current and future learning demands of adolescents and youth, as well as for basic competences among the adult population.

Local economic conditions, given that income distribution is one of the main factors explaining the lack of access to learning opportunities for youth and adults. This analysis will support LLL interventions aiming to reduce the negative effects of economic inequalities. Data from national economic and labour censuses and surveys may also support this analysis.

Unemployment and its causes, since policies aiming to improve employability by adopting a LLL perspective must strengthen existing links across all government agencies and support education and economic development. When designing LLL policies, analysts should take into account the country's employment profile and estimate the potential effects of LLL interventions. In addition, the conditions of young people not in education, employment or training (NEETs) should be analysed, along with information on the uptake of professions (including existing and potential skills gaps) and gaps in educational qualifications among the employed and unemployed.

Gender equality is another factor to be considered, since LLL policies should focus on issues related to differentiated access to education, work, freedom of decision-making and movement, discrimination, gender-based violence and personal security. Understanding these issues will identify whether LLL policies promote equality of opportunity and to what extent socio-economic opportunities are open to women and men equally.

Minorities and Indigenous groups deserve special attention when designing and implementing LLL policies, since they are often in a disadvantaged position. Surveys at the appropriate level (regional, local and community) can provide clarity on the learning needs of minorities and Indigenous groups, which can then be factored into policy development. Minorities may be identified by ethnicity, socio-economic status, lifestyle, religion, and culture or location, among other factors.

Physical and social environment, since living in a rural, urban or peri-urban setting impacts the decision to learn or continue learning and how learning is provided, from early childhood to adult learning. Policy-makers should study statistical data on the proportions of the population living

in various conditions to ascertain the particular learning and occupational needs in each context.

The interaction of all these factors, given that the issues outlined above interrelate and affect the distribution of learning opportunities. A comprehensive analysis and understanding of these interactions will enable policy-makers to assess which factors may have the greatest influence on educational access, participation and completion, and to determine how LLL policy should be oriented.

LLL IN PRACTICE

Box 2.2. — A case of a LLL policy responding to demographic changes

Chapter 1 highlighted the population ageing that is taking place in many societies around the world; policies with a lifelong learning perspective can only be demographically sensitive if they respond to such changes. In Luxembourg, the ministry of education supports learners at risk of being excluded by the digital divide – including older people as well as low-income groups – by issuing diplomas to those who pursue an 'internet *Führerschein*' ('*Führerschein*' means 'driving licence' in German, one of Luxembourg's three official languages). This is a 20-hour intensive course facilitated by trainers who are available for one-to-one and group sessions at low cost. Refresher courses are also available and allow learners to improve their knowledge of particular forms of ICT, such as communications software or internet shopping.

Similarly, in Singapore, a programme has been developed specifically for older people. Silver Infocomm Junctions are digital learning centres where courses are offered along similar lines to those in Luxembourg. These centres are products of the wider Silver Infocomm Initiative (SII), a policy launched in 2007 to extend digital inclusion to older demographic groups in the country.

Source: UNESCO, 2018a

Creating a comprehensive vision for LLL

Due to the characteristics of LLL initiatives, adopting them demands a favourable political setting to guarantee effective collaboration. This is achieved when all stakeholders value LLL as an effective and financially feasible intervention, and when beneficiaries are convinced LLL interventions will mean clear benefits for them. If these conditions are met, the probability of adopting and implementing LLL successfully will increase. This calls for a comprehensive, shared vision of LLL to which stakeholders are committed and in which they are invested. Any national LLL vision also needs to be clear, coherent, comprehensive and compelling, since a well-articulated approach facilitates widespread support, helps to secure the commitment of all stakeholders and provides guidance for pursuing policy priorities.

Such a vision should be based initially on an identification of problems, or policy issues, currently affecting the country or with a high probability of impacting national development in the future. This refers to the rationale for LLL explored in Chapter 1. LLL can address complex issues situated at the intersection of different public policy domains. To take one example, a report published by the UNESCO World Water Assessment Programme (Miletto et al., 2017) describes how, in developing countries where agriculture is the dominant sector of employment, a link exists between water scarcity (caused by climate change), youth unemployment, emigration and gender inequality. In this confluence of issues, water scarcity fuels unemployment among agricultural workers, many of whom are young men who subsequently migrate in search for work. This can, in turn, place a greater burden on women who remain – often without an accompanying increase in rights – meaning that gender disparities deepen. This example contains multiple public policy issues with interrelated causes that cannot be adequately addressed with a piecemeal approach and instead require comprehensive interventions. As LLL is holistic and intersectoral, it can be used to address multiple policy issues at the same time. In this case, a more sensitive and planned response to migration based on non-formal and informal learning programmes is needed, along with gender-responsive learning opportunities.

A wide-ranging exploration of issues can lead to the identification of a select few policy priorities to be addressed by LLL. This is a particularly sensitive and complex process in the case of LLL policy design, given that (a) there is a wide array of target populations (e.g. children, youth, adults, older people, immigrants, women and minorities, among others); (b) there are potentially multiple issues to address (e.g. unemployment, global citizenship, promoting democracy, assimilation, peace, financial insecurity, health and environment education, information literacy, illiteracy, and entrepreneurship, among others); and (c) there are multiple modalities to consider, based on formal, non-formal and informal learning models.

A well-developed national LLL vision helps policy-makers rethink both how to articulate LLL within national development strategies and legal frameworks and how to translate these definitions into specific policy documents and processes across different sectors and institutions. In light of the global challenges humanity faces, any national LLL vision should also be aligned with the 2030 Agenda for Sustainable Development and the Education 2030 Framework for Action, linking global goals to unique national contexts. Several countries have already developed a national vision of LLL through dedicated policies and strategies. Cambodia's National Policy on Lifelong Learning, for example, features a vision to 'develop every Cambodian citizen to gain knowledge, skills, attitudes, and values to contribute to economic growth and promote individual and social harmony through … lifelong learning opportunities in all contexts at any time, in any place, and by any means' (Royal Government of Cambodia, 2019, p. 3).

Box 2.3. — National visions

The Strategy for Lifelong Learning in Norway (Norwegian Ministry of Education and Research, 2007) views LLL as an ongoing educational process, from childhood to adulthood and old age. It considers LLL essential for the development of the individual, for democracy and society, and for working life. The strategy acknowledges LLL as a concept for all forms of learning throughout the lifespan and recognizes the knowledge, skills and experiences an individual has gained through education and training, paid or unpaid work, and participation in society. Among other things, Norway's vision emphasizes the need to improve collaboration between the education system and working life, to increase participation in learning among older workers and people with limited experience of education, and to improve documentation and validation of people's non-formal and informal learning.

Other countries have also included a national vision of LLL in their legislation. The constitution of the Republic of Korea, for example, acknowledges that all citizens 'shall have an equal right to receive an education corresponding to their abilities' and gives the state a duty to 'promote lifelong education' (MEST, 2012, p. 10). The term 'lifelong education' denotes non-formal learning processes that people engage in after, or in parallel to, formal schooling, vocational study and higher education. According to the country's Lifelong Education Act of 2009, 'lifelong education' refers to all types of systematic educational activities, 'including scholastic ability supplementing education … education for the enhancement of vocational abilities, education for humanities and liberal arts, education for culture … [and] education for citizens' participation' (MEST, 2009, p. 1). The act establishes that all levels of government are responsible for promoting lifelong education policies, and calls on the Ministry of Education to develop a comprehensive, lifelong education promotion plan every five years at the national level, setting mid- and long-term policy objectives and the basic direction of lifelong education promotion (MEST, 2017). The country's fourth and current National Lifelong Learning Promotion Plan (2018–2022) strengthens this national vision for LLL (cited in UIL, 2020).

Establishing governance arrangements and stakeholder involvement

National governments often create the framework and conditions for meaningful partnerships and the advancement of LLL policy across ministries, departments and local governments. In addition, they can ensure greater coordination within and between departments, and improve synergies between government and partners from different sectors. These synergies are essential in a world characterized by rapid technological, environmental, social and economic change.

Nevertheless, national governments are not solely responsible for designing and implementing LLL policies: new forms of governance are required to capture the cross-sectoral benefits of LLL. Firstly, a comprehensive approach to LLL policy is essential within the education sector itself. This should encompass all modes of learning and involve all areas of education, from ECCE to higher education, including TVET as well as adult and continuing education and education for older people. In addition, collaboration and coordination across different areas, sectors, agencies, organizations and levels of government is needed. This can involve the establishment of interdepartmental/interministerial policy frameworks and the creation of oversight bodies to ensure greater coordination.

Governments might opt to devolve more responsibility for policy-making to a city or sub-regional level. Decentralization of governance arrangements can happen in different ways, for example through the learning city model or networks of community learning centres (CLCs). In an increasingly diversified delivery context, central government must provide resources to support local initiatives and help learners access the services they need, such as in the case of partnership-based governance approaches used for learning cities.

It is important that cooperation towards LLL policy-making crosses the boundaries between formal, non-formal and informal learning. Collaboration is also required to realize the intersectoral and interdisciplinary potential of LLL in areas such as health, climate change, safety and justice. Private stakeholders, cultural institutions and civil society,

LLL IN PRACTICE

Box 2.4. — Intersectoral collaboration

Governments should recognize the important contribution of non-governmental entities, including national and international development organizations, businesses, unions, libraries and cultural institutions, and facilitate their involvement. NGOs can be important partners, particularly in providing community education. In Viet Nam, for example, the Vietnam Association for Learning Promotion (VALP) runs a network connecting central-level organizations to provincial, district and commune levels and to grassroots activities. The mission of VALP is to promote and facilitate learning for all, with the ultimate goal of building a learning society, implementing local projects and activities, and CLCs (Columbia Southern University, 2022).

Regional-level organizations also have an important role to play. In southern Africa, for example, the Southern African Development Community (SADC) is creating new opportunities to develop regional and local lifelong learning qualification frameworks that facilitate cross-border labour mobility (SADC, 2022). National governments must recognize and support NGOs as important partners in the development of national lifelong learning policy.

Another example is provided by the health sector. Since the adoption of the 1986 Ottawa Charter for Health Promotion (WHO, 2022), the World Health Organization (WHO) has repeatedly asked countries to dedicate part of their health spending to health promotion through education to reduce the growing and potentially unsustainable demand for curative health services (WHO, 2016). However, despite clear evidence of the long-term benefits and cost savings of investment in health promotion and education, most countries still fall short of the suggested allocation of 3 to 4 per cent of total health spending. This represents a missed opportunity to enable citizens to play an active role in improving their own health, engage in community action for health, and press elected officials and governments to meet their responsibilities in redressing health inequalities. Meeting the health literacy needs of the most disadvantaged and marginalized societies in particular will accelerate progress in reducing inequities in health care and prevention.

alongside ministries and local governments, have important roles to play in LLL policy, which integrates LLL into the daily life and work of citizens, ensuring their learning demands are expressed, heard and met.

Chapters 3 and 4 will provide more insights into how policy-makers can respond to the challenges and opportunities of LLL governance, particularly in terms of implementation.

LLL policies need to be politically feasible to ensure the support of relevant stakeholders and the general public and to increase the likelihood of enactment, implementation and evaluation. Effective LLL policy-making must be a well-organized process, during which roles and responsibilities, coordination arrangements and working structures are clear. An important step in this process involves setting policy priorities and developing a coherent proposal on which to consult relevant stakeholders. Identifying, involving and securing the support of key stakeholders contributes to successful policy development and effective implementation. Key stakeholders for LLL usually include:

- the ministry of education, its departments and affiliated agencies;
- the ministry of finance;
- parliament;
- other ministries and departments, which, depending on the distribution of responsibilities, may include the ministry of social affairs or social welfare, ministry of social development, ministry of agriculture, ministry of foreign affairs, ministry of health, ministry of gender equality or women's affairs, ministry of employment or labour, ministry of economic development, ministry of science and technology, and ministry of culture;
- national statistical institute/agency;
- national validation and accreditation agency;
- national agency for vocational education and training;
- agencies for teachers' professional development;
- provincial and district governments and municipal councils;
- trade and teachers' unions, labour organizations;
- representatives of the private sector;

- researchers in the field of lifelong learning, ECCE, TVET and adult education;
- national youth council, women's associations and representatives of minority groups;
- NGOs and civil society organizations active in the field of education and social affairs;
- international development partners;
- providers of formal and non-formal education.

Policy-makers must identify interested parties and their priorities to determine potential stakeholder roles in the policy process. To engage key stakeholders in a participatory process constructively, policy-makers should foster a culture of democratic and open debate. Additionally, the existence of formal structures (e.g. a consultative committee with

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Box 2.5. — Politically feasible LLL policy

The Austrian Strategy for Lifelong Learning (Austrian Federal Ministry of Education, Arts and Culture et al., 2011) was developed and launched by four federal ministries: the Ministry of Education, Arts and Culture; the Ministry of Science and Research; the Ministry of Labour, Social Affairs and Consumer Protection; and the Ministry for the Economy, Family and Youth. To coordinate the implementation process, a taskforce was established, comprising a representative of each involved ministry. In addition to the taskforce, a national platform, LLL: 2020, was established to ensure a wide involvement of relevant stakeholders at multiple levels in the implementation process. Political feasibility was strengthened by the codevelopment of the policy by multiple government ministries as well as by the participation of a cross-section of society in the national platform. Ministry representatives, social partners, state and municipal governments, universities and adult education institutions, the unemployment service and researchers all participated.

representation from different stakeholders), traditions (similar processes observed in the past) and tools (e.g. a draft with policy proposals on which stakeholders can comment) for policy dialogue may result in a more efficient participatory approach.

Finally, LLL policy is inherently linked to participatory planning. It is not merely an intervention to promote economic growth and development but also a promoter of democratic deliberation and public debate. A LLL policy should therefore be shaped by consultation exercises organized by government agencies or based on the views of national and international NGOs, advocacy groups, experts or private lobbyists. It could also respond to or address national, historical and political contexts, including current or earlier policies in the area under review, cultural and economic constraints, or current or former social, political and economic agendas. A policy should also draw on the best information available on effective previous interventions and practices and areas requiring improvement. To be effective, policies must take circumstances and needs, political contexts and available institutional capacities into consideration.

Making LLL policy financially viable

Turning a LLL vision into a policy with effective programmes requires an efficient planning process of financial investment in education and learning. If learning is to continue throughout people's lives, it is essential to establish financial incentives to mobilize greater and broader participation. Innovative financing strategies are required to secure the necessary resources to achieve goals included in any LLL national policy. To be credible and effective, a policy needs to be accompanied by a proper cost and financing framework, based on which detailed financing strategies and incentive mechanisms will be developed in the implementation plan.

LLL is offered by a broad range of providers catering to very heterogeneous populations of learners. Financing policies must therefore cover both how financial resources can be mobilized and how they can be spent

effectively by different agencies. By mobilizing finance from a diversity of sources, countries can ensure better levels of investment in LLL; and through the fair and effective utilization of financial resources, they can ensure that their societies reap the wider benefits that LLL can deliver (UIL, 2013). It is important to consider what can be financed by the government and for which programmes other sources are needed (UIL, 2016a).

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Box 2.6 — Individual learning accounts

Sometimes referred to as 'voucher systems', individual learning accounts provide targeted individuals with an entitlement to access specified learning activities from a range of approved providers. Vouchers are commonly distributed through an active labour market programme, which also provides supporting advice and guidance services. Individual learning accounts are also used to help individuals to access both non-vocational and vocational learning of their choosing.

In France, training is an 'individual right': it is framed in this way to promote social progress and reduce inequality in access. Its two main components are individual training leave (CIF) and, implemented more recently, the personal training account (*compte personnel de formation*, or CPF). The latter allows individuals – employed or unemployed – to review career-relevant information, training opportunities, unemployment assistance and other social protections. Formulated as an 'individual right' scheme, the personal account is portable and can move with the individual as they gain or change employment. It was reported that, in 2016, almost 500,000 requests pertaining to the CPF system were approved, with 65 per cent of the total being made by jobseekers and 35 per cent by employed workers.

Sources: Cedefop, 2016, 2018

The ways in which learning activities are financed vary greatly but, by looking specifically at formal and non-formal education and training, it is possible to identify some typical financing instruments. Types of non-formal education and training include provision within the private sector, voluntary sector, community and workplace, and by individuals. Public financing tends to be distributed through a range of instruments: formula funding, programme funding, project funding, direct grants, tax incentives, levy grants, training leave, loans, and individual learning accounts (see *Box 2.6*).

Several of these public financing instruments rely on private-sector collaboration; in addition, there are a number of employer-led (e.g. on-the-job training), collective (e.g. public subsidies and shared contributions) and learner-managed (e.g. student loans and individual savings) financing instruments (Schuetze, 2009). A policy should therefore provide an indication of how the funding instruments will contribute to achieving targeted goals and identify the factors that need to be considered in designing the funding instruments, aligned with the main policy goals.

While expanding access to learning opportunities is a positive development, expansion is rarely met with a proportional increase in budgetary allocation. This places public finances under strain. There are several responses available to countries: harnessing existing resources more effectively, enhancing measures of accountability for public investments in education and, perhaps most importantly, exploring and implementing new ways of mobilizing resources for education, including through arrangements with stakeholders operating outside the public sector (UNESCO, 2015). Alternative approaches to resource mobilization can lead to new opportunities for education by reducing the sector's dependence on national budgets. Moving beyond the boundaries of formal education, activities that fall within the remit of LLL are almost countless and so, while it is valuable to consider the typical funding instruments previously detailed when formulating LLL policies, alternatives should also be considered. Depending on the programme or activity, financing measures can involve cross-sectoral cooperation and partnerships and community-based funding, as well as incentives for providers and learners.

Local initiatives for resource mobilization are also important, as shown by several UNESCO learning cities, like Espoo in Finland. Espoo subsidizes civil society organizations to provide services to learners, including sports, music and after-school activities (ibid.).

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Box 2.7. — Financing adult education

The 2015 Recommendation on Adult Learning and Education suggests that Member States set incentives to facilitate learning. Many countries have acted on this guidance. For example, in Serbia, the Law on Adult Education was amended so that finances for adult education feature in national, provincial and local budgets. In the People's Republic of China, the national government has promoted the establishment of private-sector adult education centres and greater collaboration between private organizations and schools. In Poland, a National Training Fund was founded in 2014 to incentivize employer-led training by offering funding to cover training costs.

Other national initiatives have sought to facilitate a more bottom-up approach to financing ALE, such as the competitive funding system in Indonesia, which invites non-formal educational institutions to apply individually for government grants.

Source: UIL, 2016b

Gathering data for evidence-based policy-making

Relevant data on LLL opportunities and participation rates can help policy-makers focus their efforts to support underserved populations effectively, understand where – and ideally why – LLL opportunities have been inconsistent, and identify any potential synergism or need for intervention.

Box 2.8. — International data sources

Several endeavours to measure LLL have emerged in recent decades, including the Composite Learning Index (CLI) produced by the Canadian Council on Learning (CCL) and the European Lifelong Learning Indicators (ELLI) developed by the Bertelsmann Foundation. Though both initiatives have since been discontinued, they serve to illustrate a range of potential lifelong learning data sources, as well as the challenges associated with monitoring such a diversity of learning.

The CLI was an annual measure of progress in LLL, conceptualized in terms of the four major dimensions of learning identified in the Delors Report: learning to know, to do, to live together, and to be (Delors, 1996). The CLI classified 17 indicators and 26 statistical measures, which were meant to reflect the many modalities in which Canadians learn: in school, at home or work, or within the community (UNESCO-IBE, 2022).

The ELLI was also based on Delors' four pillars and described levels of LLL among European countries. It combined 36 variables to reflect a wide range of LLL activities, including participation rates in formal education and training, literacy skills (PISA), employees participating in continual vocational training (CVT) courses, labour market policy expenditure, and community engagement through cultural activities, among others. The ELLI Index stressed the known economic and social outcomes of learning – for example, income, employability, population health, and social cohesion and democracy – and aimed to be accessible to a wide audience, including policy-makers, education researchers and practitioners, individual students and parents (Bertelsmann Stiftung, n.d.).

Using the four-pillar framework of learning, Juseuk Kim (2016) constructed a Global Lifelong Learning Index (GLLI) more suited to developing countries, which is based on an array of educational, economic, social and political measures – mostly quantitative, some qualitative – available from international sources.

Information on LLL policy and its effects comes from different data sources. These include national censuses and regional statistical units; administrative data reported by schools and other education institutions; specialized surveys on aspects of LLL based on individual, household or school samples; reports by non-governmental providers or private-sector companies; and analyses found in peer-reviewed publications. The main challenge, however, is to identify relevant and solid evidence pertaining to different aspects of LLL: provision, access, participation, completion, quality, funding, learning processes and learning outcomes.

Given the intersectoral reach of LLL policy, information on the interrelationships between the education sector and other sectors is also needed. Such information might focus on how learning can be applied to health care, child care, jobseeking, increased productivity, and other aspects of life and work, which may be invisible to policy-makers. Both quantitative and qualitative data feed into effective LLL policy, as does information on the equality of LLL opportunities. Expertise is needed to ensure the careful processing and analysis of data and their visualization in different formats.

A critical aspect for the successful adoption of an evidence-based LLL model is establishing mechanisms that monitor and evaluate LLL policy systematically on an ongoing basis. This not only enables countries to better meet the LLL needs of all groups but also contributes to the 2030 Agenda for Sustainable Development, which stresses the importance of LLL for sustainable development and calls for efforts to monitor LLL and ensure its quality. Monitoring is an 'ongoing, systematic collection of information to assess progress towards the achievement of objectives, outcomes and impacts' (Mcloughlin and Walton, 2012, p. 6), whereas evaluation is 'an assessment, as systematic and objective as possible, of an on-going or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, developmental efficiency, effectiveness, impact and sustainability' (OECD, 2013, p. 33).

M&E of LLL policies should build on existing data collection and monitoring mechanisms; yet, in many countries, the provision of LLL is

diversified and does not easily lend itself to monitoring. A periodic report presenting data on key measures of LLL 'at a glance' should be considered and, at later stages, the analysis of trends and patterns should be conducted to identify main challenges and prioritize measures for improvement.

General recommendations for the monitoring and evaluation process

(adapted from Weiss, 1998)

- A monitoring and evaluation system design should consider not only information production but also how to promote the instrumental use of evidence.
- It should be a continuation of previous stages of the policy-making process. It must capture the principles agreed upon, particularly during the problem-definition and policy-design stages.
- It requires the development of local capacities.

Given that the analysis it generates may have consequences for the continuation, redefinition or termination of a policy, M&E is a particularly demanding stage of the LLL policy-making process.

Box 2.9. — Monitoring participation in adult learning and education (ALE)

At the international level, UNESCO's Global Report on Adult Learning and Education (GRALE) monitors the state of adult learning and education – as a key dimension of LLL – in Member States. The most recent edition, *GRALE 4*, had a thematic focus on participation, equity and inclusion. Drawing on a monitoring survey completed by 160 countries, the report found that:

- participation in ALE is uneven. While it has increased overall since 2015, rates of participation vary considerably, and progress has been uneven not only between regions but also within them. Many vulnerable groups continue to be excluded and are seemingly off the radar of policy-makers. Thus, in one-third of countries, fewer than 5 per cent of adults participate in ALE;
- changes in participation vary: the largest increase in participation since 2015 is for women (59 per cent of 139 Member States), followed by unemployed adults (54 per cent of 134 Member States) and adults lacking education and skills (48 per cent of 136 Member States). Even if women's participation is growing, they still have no access to education in some parts of the world, especially in poor rural areas. With the majority of these women having low levels of literacy, they engage less in programmes for professional development;
- a major constraint in participation in ALE is the scarcity of data. This hinders efforts to improve participation rates and to understand who is not participating and why – both essential undertakings in achieving SDG 4 on education and advancing towards the 2030 Agenda for Sustainable Development.
- progress in policy and governance is insufficient;
- ALE is underfunded. Unfortunately, only 28 per cent of Member States responding to the *GRALE* survey reported that ALE spending as a proportion of public education spending increased, 41 per cent reported no progress since 2015, and 17 per cent said that they did not know whether there had been a change to ALE spending in the past three years;

>

- deep inequalities in participation persist. Vulnerable groups are still excluded, which constitutes a concern for their participation in the labour market. Migrants and refugees, older adults, adults with disabilities, those living in rural areas, and adults with low prior educational attainment are among the groups facing the greatest barriers to participation in ALE.

Preparing LLL policy for implementation

This chapter has defined and examined LLL policy and the LLL policy-making process. By exploring key factors for effective LLL policy, it has established the importance of aligning LLL with national and local contexts, creating a comprehensive vision for LLL, establishing governance arrangements and stakeholder involvement, making LLL policy financially viable, and gathering data for evidence-based policy-making. These factors provide a basis for the development of LLL policy. Chapter 3 will now explore implementation, revealing the heterogeneity of LLL initiatives and how this diversity can be reflected in policy.

IN YOUR CONTEXT

Designing effective LLL policies

Chapter 2 explored LLL policy and the policy-making process, revealing key factors for effective policy development. It has shown that policy is made more effective by adopting a LLL perspective, whether it assumes the form of a comprehensive LLL policy or strategy, or sectoral policies developed from a LLL perspective. You are now encouraged to make connections between the guidance featured here and the reality of policy-making in your national context.

Key points:

- LLL policy denotes an amalgamation of documents and processes that explicitly contribute to the promotion of LLL across the country, including legislation, policies, strategies and action plans.

- LLL policy can be developed in different forms: by integrating a LLL perspective into sectoral policies, or by developing a distinct, comprehensive LLL policy that cuts across different sectors.

- Sectoral policies developed from a LLL perspective are typically under the responsibility of a particular ministry (e.g. education, labour, social affairs) but may extend beyond that sector.

- LLL policy also includes the development of a comprehensive LLL policy document or strategy which typically cuts across different (sub)sectors. It may be the joint responsibility of several departments or ministries, or under the direct responsibility of the head of government (president, prime minister or equivalent).

- Effective LLL policy is characterized by several factors: it is aligned with national and local contexts; features a comprehensive vision for LLL; is financially viable; and reflects the governance arrangements that have been established, evidence that can be used as a basis for M&E, and the consultations that have been initiated in the name of participatory LLL policy-making.

Questions for reflection:

- Does your country have a national LLL policy?
- Does your country have mechanisms in place to monitor and evaluate education and learning in formal and non-formal contexts?
- Is LLL embedded in specific policies of importance to your sector?
- To what extent do existing national policies reflect the factors detailed in this chapter?

Possible actions:

We recommend that you undertake a short, practical exercise to apply the information provided in this section of the chapter. The exercise involves a quick analysis of a single policy document to determine the presence of a LLL perspective. To do this, first find out whether your country, region or local government has a national LLL policy and acquire a copy. Alternatively, find a recent flagship policy for your sector or subsector that could be considered a LLL initiative. Go through the document and evaluate critically whether it:

- is aligned with national and local contexts;
- features a comprehensive vision for LLL;
- establishes governance arrangements;
- is financially viable;
- uses evidence that forms the basis for M&E.

Essential reading

UIL (UNESCO Institute for Lifelong Learning). 2022. *Collection of lifelong learning policies and strategies*. [online] Hamburg, UIL. Available at: https://uil.unesco.org/lifelong-learning/lifelong-learning-policies [Accessed 11 January 2022].

Further reading

Kim, J. 2016. Development of a global lifelong learning index for future education. *Asia Pacific Education Review*, 17, pp. 439–463.

MEST (Ministry of Education, Science and Technology, Republic of Korea). 2016. *Lifelong education act*. [online] Available at: https://elaw.klri.re.kr/eng_mobile/ganadaDetail.do?hseq=38878&type=abc&key=LIFELONG%20EDUCATION%20ACT&param=L [Accessed 20 April 2020].

UIL. 2019. *4th Global Report on Adult Learning and Education: Leave no one behind: Participation, equity and inclusion*. [PDF] Hamburg, UIL. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000372274 [Accessed 21 April 2020].

CHAPTER 3

Designing an implementation strategy for lifelong learning

GUIDING QUESTIONS

Why is a national LLL implementation strategy valuable?

What are some general factors to consider during the design of a LLL implementation strategy?

How can the strategy strengthen LLL through formal, non-formal and/or informal learning opportunities?

How can the implementation of LLL support flexible learning pathways so that learners can transition into and between learning programmes, within and across different learning modalities?

What role does ICT play in the implementation of LLL?

Why and how should collaboration be fostered across different sectors and groups of stakeholders responsible for LLL implementation?

DESIGNING AN IMPLEMENTATION STRATEGY FOR LLL

Following an introduction to LLL as a concept and an overview of starting points for the promotion of LLL as an integrated policy in Chapter 1, Chapter 2 went deeper into the policy-making process with a guide to designing policies with a LLL perspective, and a presentation of these policies' key features. The first two chapters of this handbook therefore aided the identification of potential opportunities to promote the adoption of national LLL agendas and provided a schema for policy-makers to begin to advance LLL as a viable national policy. Chapter 3 now focuses on implementing LLL in diverse contexts, which can be led by national policy-makers.

This chapter begins by introducing the national LLL implementation strategy: a process that sets out the key elements of and arrangements for LLL implementation, and supports the translation of LLL policies into LLL opportunities for all. Moving to the first area of implementation in formal education, Chapter 3 reveals how LLL implementation occurs – and how it can be reinforced – in institutions such as schools and universities. Attention then shifts to diverse forms of non-formal and informal learning which, though less regulated than formal education, can still be fostered by a national LLL implementation strategy. It is important to remember that LLL does not equate to non-formal and informal learning, but rather captures all learning modalities. Classifications of formal, non-formal and informal learning featured in this handbook are used for analytical purposes during the design of implementation strategies – they are not meant to be applied as rigid and prescriptive definitions of LLL initiatives.

The next section demonstrates how LLL implementation is strengthened by creating flexible learning pathways that establish connections between formal, non-formal and informal learning. It emphasizes that boundaries between learning modalities are often blurred, and that any LLL implementation strategy benefits from the integration of different modalities and pathways between them. The chapter continues with an

exploration of how advancing ICT can strengthen LLL implementation, before concluding with a reflection on multi-level governance – meaning the forging of partnerships between stakeholders at different levels of LLL implementation. This is particularly important for LLL at the local level, which is addressed in the fourth and final chapter of this handbook.

Like Chapters 1 and 2, Chapter 3 provides practical guidance on making LLL a reality. This guidance reflects diverse areas of LLL and cuts across various levels and contexts of implementation. Nevertheless, all information relates back to the development of a national LLL implementation strategy, which constitutes a clear roadmap for LLL implementation in any national context.

The purpose of a LLL implementation strategy

Implementation strategies are integral to improvements in both the availability and quality of LLL opportunities for all. As we have seen in the previous chapters, LLL initiatives can take many forms to respond to very different contexts, public problems and expected outcomes. Effective implementation therefore depends upon a well-devised strategy targeting the appropriate area(s) of LLL. There are several areas of LLL implementation featured in detail in this chapter: formal education, non-formal and informal learning, flexible learning pathways, and ICT. A national LLL implementation strategy is likely to focus on several or all of these areas of LLL. Some of the information provided in the strategy may be specific to a particular type of institution or a certain mode of delivery.

General considerations for LLL implementation strategies

As a national LLL implementation strategy should be tailored to a specific national context, its characteristics vary by country. In any given strategy, certain areas of LLL implementation may be emphasized more than others. As a result, LLL implementation strategies do not all look the same, yet there are some common features that are typical to this type of approach. *Table 3.1* describes some general considerations that

exemplify the types of information, topics and analyses required to anticipate conditions that affect LLL implementation. We advise integrating these considerations into your strategy design. It is, however, not an exhaustive list.

Table 3.1. General considerations for LLL implementation strategies

Policy landscape	• Take stock of existing policies, legislative frameworks, plans and reforms relevant to LLL at the national level. • If relevant, include similar documents developed at the local or institutional level. • Documents relevant to the LLL policy landscape include national LLL policies, education policies, education sector plans, overall development policies, and policies detailing commitments to the SDGs. • Consider whether the policies compete with or complement the ambitions of the LLL implementation strategy to be developed. • Through an evaluation of the LLL policy landscape, establish parameters and opportunities for the LLL implementation strategy.
Priority issues and target groups	• Outline the context-specific priority issues for LLL. • Consider angle(s) or area(s) of action related to LLL priority issues, i.e. participation, inclusion and equity, quality, relevance, financing or other. • Identify and define target groups, current conditions, obstacles and benefits. • Highlight those target groups comprised of vulnerable populations or underserved communities.
Objectives and targets	• Develop the previously identified priority issues into a list of objectives. • Draft targets for each objective. Consider the surrounding policy landscape and resource availability to ensure feasibility. • Set a timeframe to achieve selected objectives and targets.

Table 3.1. General considerations for LLL implementation strategies

Objectives and targets	• Outline monitoring and measurement processes for objectives and targets throughout the period of implementation. • Plan to evaluate the impact of the LLL implementation strategy.
Planned interventions	• Outline the LLL programmes, initiatives or other interventions necessary to achieve the objectives and targets. • Consider how and where the planned interventions will take place and the logistical arrangements required, including delivery methods. • Anticipate the expected effects of interventions and their relationship to the objectives and targets of the LLL implementation strategy. • Pay particular attention to the expected effects of interventions on vulnerable populations or underserved communities. • Envisage the wider effects the planned interventions may have, e.g. influencing the redesign of existing policies or prompting the creation of new policies. • Formulate ways to enhance the wider credibility of planned interventions and acceptability of outcomes, i.e. consider whether outcomes will be accepted by governments/agencies/institutions.
Stakeholder involvement	• Consider the objectives, targets and planned interventions of the implementation strategy, identifying which (groups of) stakeholders will need to be involved. • Map out the networks crucial to the success of LLL implementation, i.e. relationships between (groups of) stakeholders. • Clarify the level(s) at which stakeholders operate to plan for multi-level collaboration as required. • Devise ways of securing stakeholders' involvement in the LLL implementation strategy – try to involve them in the design of the implementation strategy as early as possible (even at this stage).

Throughout this chapter, similar tables of key considerations for LLL implementation strategies can be found at the end of each section, though the categories differ depending on the area of implementation.

Fostering LLL in formal education institutions

Formal education tends to receive the most attention from planners and policy-makers. While this handbook – and, indeed, the wider discourse – asserts that LLL comprises a diversity of learning modalities and environments that goes beyond formal education, it is also important to highlight the relevance of the formal education sector to LLL promotion. Though formal education institutions such as schools, universities and TVET institutes may have been associated traditionally with strictly demarcated target groups, standardized curricula and fairly rigid learning pathways, there is plenty of evidence around the world indicating a transformation of the formal education sector. Formal education institutions have started to embrace the concept of LLL by opening up to new groups of learners, developing innovative teaching and learning formats, and supporting flexible pathways. This section will provide some examples of how formal education institutions have adapted and broadened their scope of activities, and will suggest a series of steps they can take to become LLL institutions.

Schools

Schools are uniquely positioned to promote a culture of LLL by sparking children's curiosity and encouraging them to become lifelong learners. As the most recognizable educational institution and with roots embedded deeply in local communities, schools can support LLL in different ways; for instance, by opening their doors to different target groups beyond traditional cohorts of children and youth. One way of catering to the needs of the local community is by making the school's facilities available for youth and adult learning outside of normal school hours. Schools' facilities – books, computers, learning spaces and sports equipment – are valuable resources that can be used in the evenings and at weekends for the benefit

of youth and adults. In addition to physically opening up to the community, schools can also broaden the scope of their educational activities to develop learning communities, particularly by supporting family literacy, citizenship education or community engagement. They can reach out to local families to inform and teach them about issues of relevance to them, e.g. health and well-being, finances and ICT, among others.

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Box 3.1. — Basic education schools

In Turkey, the 'Let the Schools Become Life' project, run by the Ministry of Education's General Directorate of Lifelong Learning, aims to promote LLL by making primary school facilities accessible to parents and other members of the local community. This involves extending opening hours – for example, making the school library and ICT facilities available in the evenings – and providing a setting in which a range of vocational, cultural and social activities, such as sports events, music and language classes, and computer skills courses, can take place.

In Hamburg, Germany, the Family Literacy Project (FLY) is an intergenerational programme targeting parents and children at pre-school, kindergarten and early primary school, as well as children with special learning needs. Many of them come from socially disadvantaged communities. The project endeavours to develop the literacy skills of parents and their children. It also seeks to promote strong linkages between the kindergarten or school and home-based learning processes by helping parents to carry out literacy activities at home and enabling them to assist with their children's schoolwork, as well as training schoolteachers how to instruct children from diverse cultural backgrounds.

Sources: Karatas, 2015; Hanemann, 2017

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Box 3.2. — Integrating digital technologies into schooling in Uruguay

The Uruguayan initiative Plan Ceibal (Conectividad Educativa de Informática Básica para el Aprendizaje en Línea or 'Educational connectivity in basic computing for online learning') was first implemented in 2007. Its underlying principles can be traced back to the non-profit initiative One Laptop per Child (OLPC) but have been adapted and developed by Uruguayan stakeholders to complement the national context.

The plan includes three components – educational, social and technological – which, together, aim to enhance inclusion and equal opportunities, and to incorporate digital technologies into educational policy.

For the technological component of the plan, Plan Ceibal supplies free laptops with wireless technology to students and teachers across Uruguay. In addition to making digital technologies available, Plan Ceibal also promotes innovative pedagogical approaches and advises on the use of digital tools and resources, for example by hosting workshops to support the adaption of open educational resources (OER) in line with teachers' (and learners') needs, as well as by offering a postgraduate diploma in practice innovation with the use of OER.

Another skills development initiative started in 2017 by Plan Ceibal is Jóvenes a Programar, which provides training in software testing and programming languages to young people between the ages of 17 and 26 years in response to the high demand for skilled workers in the IT sector.

Source: Plan Ceibal, 2019

To make schooling a positive, enriching learning experience for children, pedagogical concepts must reflect their needs, talents and interests. Digital devices such as PCs, laptops, tablets and smartphones, which are increasingly available in classrooms around the world, support effective teaching and learning processes, yet the success of technology-enhanced learning depends on well-trained teachers and requires thoughtfully planned learning activities. More recently, during the COVID-19 pandemic, school pupils' access to mobile devices quickly became a policy priority for national and local governments worldwide. With sporadic shifts between classroom and distance learning during the different phases of the pandemic, these devices – and the flexibility they provide – became essential for the continuation of formal education.

Higher education institutions

Universities and other higher education institutions (HEIs), such as universities of applied sciences, polytechnics and technical institutes, play a crucial role in providing LLL opportunities. Over the past 20 years, several international and regional frameworks and recommendations emphasizing the importance of universities in promoting LLL, and which outline major areas for transformation, have been developed. One example is the *European Universities' Charter on Lifelong Learning* (EUA, 2008), which calls on universities and governments to commit to LLL and provide the necessary frameworks. UNESCO's second World Conference on Higher Education (WCHE), held in Paris, France, in 2009, also stressed the role of higher education in promoting LLL within the context of the knowledge society (Altback, Reisberg and Rumbley, 2009). More recently, in 2015, the United Nations' 2030 Agenda for Sustainable Development, and specifically SDG 4, further promoted LLL and asserted that all women and men should have access to affordable and high-quality tertiary education, including university (UN, 2015).

While HEI mandates have been traditionally defined in terms of teaching and research, they have increasingly started to recognize LLL as a third mission. HEIs have developed a variety of strategic approaches to promote LLL: continuing education for adult learners, flexible (degree

and non-degree) programmes, innovative concepts for technology-enhanced learning, open-science policies to make their research outcomes widely available, flexible pathways into and through higher education, and collaboration with businesses and local communities.

LLL in the higher education sector goes beyond skills development to address the needs of changing labour markets and economies. Importantly, it involves widening access and participation (increasing not only the number but also the diversity of students) to achieve more equitable

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Box 3.3. — Universities reaching out to new groups of learners

An interesting example of how HEIs have in the past two decades begun to widen their scope to include LLL can be found in Thailand, where academic university staff specializing in adult education began to advocate for new learning opportunities for older people during the 1990s. With approval from the country's ministry of education, some of these academics formed consultative taskforces and developed 'active ageing learning centres'. These centres are now some of the most prominent settings in which older people learn in Thailand and have become local community centres that support social interaction.

Similarly, Universities of the Third Age (U3As), which originated in France during the 1970s, provide social spaces where older people can strengthen existing knowledge and access new learning. While some U3As are integrated into or linked to higher education establishments, others have an independent educational status. Regardless of their context, the academic status of U3A activities is guaranteed through its charter, which is published on the International Association of Universities of the Third Age **website.**

Sources: Gary and Dworsky, 2013; Wang, 2017; Formosa, 2014; IAUTA, n.d.

educational opportunities for all. So-called 'non-traditional learners' include working professionals, older people, people with low socio-economic status, migrants, Indigenous populations and ethnic minorities, persons with disabilities, and those living in remote areas, among others. Such changes in the demography of higher education students require the development of flexible, part-time and distance-study programmes following pedagogical concepts that take into consideration the work experiences and life situations of diverse groups of learners.

As mentioned, an important element of HEIs' transformation into institutions for LLL is the provision of alternative pathways; that is, the enabling of entry and re-entry points at all ages, which strengthens links between formal and non-formal structures and between vocational and academic-oriented education, and which offers mechanisms for the recognition, validation and accreditation (RVA) of the knowledge, skills and competencies acquired through non-formal and informal learning (UNESCO, 2016a). Student support services, which inform and guide students in RVA and transition processes, are crucial to ensure the effectiveness of such frameworks and mechanisms.

Access to higher education can also be enhanced through alternative university models such as open universities. Open universities are a type of distance-teaching institution offering flexibility in terms of entry requirements, learning media and approaches, and choice of courses, time and place of study (COL, 2020). The establishment of the Open University in the United Kingdom of Great Britain and Northern Ireland in 1969 was considered revolutionary, as it made higher education accessible to all, no longer just to the elite. The model spread and, 50 years later, some 60 open universities exist around the world (Tait, 2018).

TVET institutions

Considering ongoing and prospective transformations of the labour market, LLL will be key for TVET institutions to prepare workers for the jobs of the future. The shifts in the employment sector are characterized by a large number of jobs disappearing due to automatization and AI, as well as by the

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Box 3.4. — Alternative university models

The UK's Open University is the original and perhaps the most famous educational organization founded on the concept of distance learning. Its modus operandi is 'supported open learning', which has four basic principles: 'flexible' means that students can study whenever and wherever, combining their learning with other commitments; 'all-inclusive' refers to the availability of high-quality resources for all; 'supportive' describes the capacity of personal tutors to teach and provide feedback; and 'social' in part denotes online study networks for students. Most of its undergraduate courses have no formal entry requirements, although an undergraduate degree is required for postgraduate courses. Learners must pay fees to enrol in courses. The Open University has also launched an online learning platform with a variety of interactive materials freely accessible to everyone, including non-students.

Source: Open University, 2019

emergence of new occupations which require flexible skills sets (Kanwar, Balasubramanian and Carr, 2019).

UNESCO's *Recommendation concerning Technical and Vocational Education and Training (TVET) 2015* describes TVET as follows: 'TVET, as part of lifelong learning, can take place at secondary, post-secondary and tertiary levels and includes work-based learning and continuing training and professional development which may lead to qualifications' (UNESCO, 2016a, p. 5). It further points out that 'learning to learn, the development of literacy and numeracy skills, transversal skills and citizenship skills are integral components of TVET' (ibid.). The promotion of so-called twenty-first century skills in TVET is key to ensuring employment opportunities for people of different ages.

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Box 3.5. — TVET in Germany

New models for work-based and community-based learning must support transformative LLL. Digital technologies can aid such innovative learning models, an example of which can be found in Germany. Within the German education system, an integrated model for TVET exists that includes work-based learning in companies along with part-time courses at vocational schools. To strengthen cooperation between these two learning environments, Germany's Federal Ministry of Education and Research developed BLok (Online-Berichtsheft zur Stärkung der Lernortkooperation), a **web application*** that allows apprentices to record and track their learning processes in the workplace and at school. The online record can be shared with teachers, trainers and supervisors to evaluate apprentices' performance and to discuss their strengths and weaknesses in light of their achievements. The application also includes a resource centre with guidance materials, including a handbook for apprentices, teachers and supervisors.

Source: Kanwar, Balasubramanian and Carr, 2019

* https://www.online-ausbildungsnachweis.de/portal/index.php?id=7 (in German)

Considering the major contribution of the informal labour market to global GDP and the large number of people working in the informal sector, the need for creating stronger links between TVET and non-formal and informal learning is indisputable. TVET is found at secondary, post-secondary and tertiary levels of education and is provided in formal schools and HEIs as well as in specialized formal TVET institutions. Usually, upper secondary education and formal public and private TVET providers prescribe entry requirements. As the International Labour Organization (ILO) points out in a research brief, 'entry requirements can often not be met by workers in the informal economy. Additionally, most formal providers are not geared towards recognizing non-formal or informal learning' (ILO, 2020a, p. 3).

ILO has formulated a set of recommendations to enable formal TVET providers to extend skills development opportunities to workers in the informal economy, including through online and distance learning (ibid.). For training to be relevant to the informal sector, skills development should not only comprise technical skills but also negotiation, entrepreneurship and basic digital skills. Delivery must be flexible to respond to the needs of informal workers, and opportunities for second-chance education should be offered. Offering recognition of prior learning outcomes and formally recognized certifications and pathways to trained informal economy workers establishes stronger links between formal TVET and the informal labour market.

Becoming a LLL institution: A guide to transformation for formal education institutions

Formal education institutions – including schools and higher education institutions – can initiate a process of internal reforms to transform into LLL institutions. The purpose of the institution's existence is enriched fundamentally as it becomes part of something bigger, responding to the needs of diverse groups of learners that may previously have been neglected. A further impact is seen on the transformation of learners' experiences and on staff working in the educational field, who benefit from increased professional development opportunities. This, in turn, has a positive influence on the quality of teaching and learning. In this section, we present six main areas of transformation to provide guidance on how formal education institutions can transform into LLL institutions.[1] We will elaborate on these areas of transformation using examples from schools and universities.

Institutional strategy and leadership: As a starting point, formal education institutions should be encouraged to develop institutional LLL strategies that set out the parameters of and conditions for transforming into a LLL institution. An institutional strategy should map out broad areas of change as well as more specific details on how change can be achieved.

1 Some of these areas are inspired by The Cape Town Statement on Characteristic Elements of a Lifelong Learning Higher Education Institution (UWC and UIE, 2001).

It should be comprehensive and should indicate the impact such change will have on each department and unit of the institution. Institutional strategies require strong commitment from senior leaders, yet they can only be achieved if supported by staff at all levels. An institutional strategy should therefore be developed through a participatory process. It may also lead to the establishment of a dedicated, transversal unit that takes the operational lead for implementation. Initiated at the institutional level, this process is a microcosm of the creation of a comprehensive vision for LLL at the national level, as explored in Chapter 2.

Partnerships: To better facilitate LLL, formal education institutions can also establish collaborative partnerships with other organizations or companies. Partnerships may range from simple and short-term to complex and long-term. Partnerships can cut across different sectors, as illustrated by the learning city Swansea, UK, where partnerships have been established between education providers and businesses. Centerprise is an initiative launched by Neath Port Talbot College Group to provide cost-free services and facilities to young people interested in setting up their own business. Additionally, Gower College Swansea started the Entrepreneurship Academy Wales, which educates young adults in entrepreneurship and enterprise (UIL, 2015).

Teaching and learning processes: A child's school experience shapes their perspective on education and learning significantly. When primary education is oriented towards the principles of LLL, it helps to prepare children for a wealth of learning opportunities beyond their school years. Process-oriented teaching within formal institutions should transfer responsibility for the learning process gradually to students, promote the acquisition of subject knowledge, recognize influential emotional factors and view the whole learning process as a social phenomenon (Bolhuis, 2003). These principles also apply to higher education and TVET. They address the changing roles of teachers and learners by acknowledging and integrating students' prior knowledge and experiences into learning processes to make learning relevant to them. Learning should essentially be student-centred, active, engaging and enjoyable (Mullins, 2017).

Learner support systems and services: Learner support brings many advantages: it improves learner retention and completion, promotes well-being and facilitates access to flexible learning pathways. It can be general or cater to the needs of specific target groups. A more general form of learner support can be seen in career guidance made available by formal education institutions, which may include career information, (self-)assessment tools, counselling services, career management programmes, taster programmes and transition services. Learner support can also be tailored to specific target groups. For example, in Sweden, a language introduction programme was created for recent arrivals in upper secondary school with materials produced to help students track their knowledge and experience in Swedish as well as in their mother tongue (UNESCO, 2018).

Staff development: The transformation of formal education institutions relies on effective staff development, which requires resources – time, commitment and financial investment. Staff development may include enrolment in higher education programmes, tailored teacher training and mentoring, and participation in courses, workshops and conferences with advantages for teaching quality and student achievement (Ngala and Odebero, 2010). Staff acquire new pedagogical skills to strengthen teaching practices and renew previously acquired knowledge while gaining an understanding of unfamiliar concepts. They can then better relate different concepts and make connections between learning (Khan and Chishti, 2012). Staff development measures should also encompass leadership and management skills of education professionals.

Organization of learning spaces: Just as technological change and pedagogical reform lead to transformations in learning processes, they can also lead to a reassessment of learning spaces. The role of the teacher is changing, and a learner-centred approach is gaining prominence. Policy-makers need to rethink classroom design and organizational infrastructure for learning both inside and outside of the classroom. In formal education institutions, the classroom is only one of a number of physical spaces (that might also include laboratories and lecture halls) in which structured teaching takes place, as well as libraries and study rooms. Physical spaces in formal institutions can be adapted to maximize learning, for example

by enabling students to access additional virtual learning resources using Wi-Fi and user-friendly workstations. Embracing technology in the classroom is also covered in the 'blended' learning design, in which face-to-face and online learning complement one another (Fraser and Tight, 2016).

Formal education in LLL implementation strategies

Throughout this section on LLL in formal education institutions, there have been multiple references to institutional strategies to embrace a culture of LLL. The development process of an institutional strategy should involve a broad range of stakeholders within the institution and possibly external partners as well. The strategy should be tailored to the unique characteristics of the institution, considering context-specific factors such as the size of the institution and its general mandate, the demography of the student population, levels of education and resources. The development and implementation of an institutional strategy will differ significantly across schools, higher education institutions and TVET institutions, yet there are considerations relevant to all formal education institutions seeking to strengthen LLL. Based on the previously identified areas of action that are particularly relevant for becoming a LLL institution, *Table 3.2* presents a detailed set of considerations for LLL implementation strategies within formal education institutions.

Table 3.2. Key considerations for LLL implementation strategies – formal education*

Institutional strategy and leadership	• Promote the development of a LLL strategy at the institutional level as a framework for transformation. • Encourage senior leaders of formal education institutions to initiate a participatory process so that all departments and units are involved in the development of an institutional LLL strategy. • Recommend the establishment of a unit in the institution dedicated to operationalizing the strategy, where appropriate.

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* Some of these areas are inspired by The Cape Town Statement on Characteristic Elements of a Lifelong Learning Higher Education Institution (UWC and UIE, 2001).

Partnerships	• Create enabling conditions to establish partnerships across formal education institutions at different levels. • Facilitate the forging of partnerships across sectors so that there is a dialogue between institutions, local government, civil society and the private sector. • Convey the diversity of opportunities available to formal education institutions by establishing partnerships.
Teaching and learning processes	• Design national frameworks and measures to promote innovative teaching and learning processes that instil a sense of autonomy and self-motivation in learners. • Guide formal education institutions to adopt process-orientated teaching and learning. • Allow for flexibility in national curricula to adapt formal education to learners' experiences and motivations.
Learner support systems and services	• Facilitate links between formal education and the labour market by supporting institutions in advancing their career guidance services. • Promote the creation of support systems to reach out to drop-outs, students with special learning needs, refugees, migrants and other vulnerable groups. • Devise learner support systems tailored to specific target groups, such as providing language classes to migrants and refugees.
Staff development	• Provide training opportunities for teachers and facilitators to improve the quality of teaching and learning. • Offer capacity-building and training for management skills, including senior leadership of institutions. • Integrate up-to-date staff development priorities in national teacher training courses.
Organization of learning spaces	• Cultivate the idea in national policies that learning extends beyond the classroom and that a formal education institution may comprise diverse learning spaces. • Allocate resources to reorganizing existing learning spaces and creating new spaces to support new pedagogies, blended learning and the extended use of technology.

Enhancing non-formal and informal learning opportunities

Non-formal learning is often institutionalized but less regulated when compared to formal education, and is therefore more flexible in responding to people's learning needs. Institutions for the provision of non-formal learning vary more in their structures than those where formal learning takes place, but flexibility is perhaps a common attribute that they share: non-formal learning institutions' sizes, locations and activities are more adaptable and are therefore well-suited to rapidly changing circumstances or filling a perceived gap that formal learning provisions struggle to cover. Non-formal learning also takes place outside of institutions, e.g. through workplace-based training, community-organized learning opportunities or family learning.

Informal learning results from daily life activities related to work, family or leisure. It is not structured in terms of learning objectives, learning time or learning support. It does not typically lead to certification. Informal learning may be intentional but, in most cases, it is non-intentional ('incidental' or random) (Yang, 2015). It is not possible to provide examples that cover the full extent of informal learning opportunities in which people engage throughout their lives. A typically broad area in which informal learning can be fostered comprises public learning spaces such as museums and libraries, religious settings, sports organizations and cultural centres. By its very nature, informal learning cannot be planned or implemented deliberately. It is, however, possible to plan for conditions conducive to fostering it, for example by recognizing learning outcomes in informal settings and creating a public learning culture to make learning a joyful and enjoyable event.

This section focuses on a number of non-formal learning environments, including community learning centres (CLCs), adult learning centres, libraries, study circles and the family, before addressing informal learning opportunities. These diverse learning environments reflect the 'all spheres' dimension of the UNESCO understanding of LLL, as articulated at the start of Chapter 1.

Scope of non-formal learning environments

Non-formal learning assumes many forms, both within and outside of institutions. Types of institutions known for their provision of non-formal learning including CLCs and adult learning centres. Public learning institutions are also organized spaces that provide opportunities to diverse groups of visitors for non-formal learning. Public learning institutions include libraries and cultural institutions such as museums, theatres and concert halls. There are also many small-scale, community-based environments for non-formal learning, some of which will be covered here.

Community learning centres

The CLC centre concept has a rich history in many parts of the world. CLCs are key providers of adult learning, providing degree and non-degree programmes that serve diverse learning needs. Depending on the country or subnational region, CLCs are set up and administered by bodies representing different sectors and consequently have a variety of funding structures, programme types and target groups. Increasingly, CLCs have been exploring ways to support the RVA of community-based learning activities to make learning outcomes more visible. RVA enables participants to gain access to new pathways (bridging learning in formal and non-formal contexts), thus supporting learning continuity for all.

Particularly in Asia, CLCs have served as a popular paradigm of non-formal learning, presented as environments for learning activities in both urban and rural contexts. In the city of Shanghai, People's Republic of China, for example, CLCs have played a major role in meeting the educational needs of older people, contributing to coping with the challenge of population ageing. According to the latest data from the Shanghai Municipal Bureau for Statistics, at the end of 2019, the registered population aged over 60 accounted for 35 per cent of the total registered population in the city (Xinhua, 2020). To promote active and healthy ageing, the city government has established around 6,000 CLCs (at both the township and neighbourhood levels) to provide learning programmes targeting older citizens. More than 40,000 classes accommodate 820,000 learners in total (Shanghai Education Committee, 2019). These classes cover a variety of

subjects mostly catering to the interests of older learners. The classes on self-rehabilitation based on Chinese traditional medicine, on the Chinese martial art of tai chi, and on smartphone usage are three of the most popular options.

In rural areas, where access to educational opportunities is limited, CLCs are particularly relevant to the provision of learning programmes. In Bangladesh, for example, the focus of CLCs' activities is establishing a connection between literacy learning and skills training for youth and adults to support sustainable local development. Activities therefore cover themes of income generation and basic literacy, as well as health, sanitation and early childhood care. Social events, such as theatre shows and writing competitions, are also organized to promote literacy skills. The involvement of various NGOs with knowledge and experience in relevant fields has contributed to CLC development in the country: Ganokendra ('People's centre' in Bengali) have been overseen by the Dhaka Ahsania Mission and the Bangladesh Rural Advancement Committee (BRAC) (Hanemann, 2012).

In Germany, Volkshochschulen (VHS) are adult learning centres founded on principles of liberal education. The courses offered are accessible to everyone and cover a broad range of themes, including professional skills, languages, general education, and arts and crafts, among others (EAEA, 2011). Though all Volkshochschulen are overseen by the German Adult Education Association (DVV), they assume different structures and sizes as well as levels of activity and authority, depending on the state or municipality in which they operate. There are over 900 VHS centres across Germany; similar to CLCs, they are positioned as institutions that bring local people together to learn. While there are course fees for participants, costs are kept relatively low to try to maximize participation and support the interaction and shared experiences of people from different social backgrounds (Wulff, 2011).

Libraries

For centuries, libraries have existed as hubs of local and lifelong learning, providing equal and free access to materials and literacy services to all age groups. In addition to and in cooperation with local museums, they preserve and provide access to local and international culture and heritage. They also advance digital inclusion through shared and cost-effective access to ICTs. The term 'libraries' denotes an assortment of institutions, including those that are public, community-led, private, university- or school-based, or located in prisons. In general terms, libraries are part of a local community's social fabric. They are meeting places that forge connections between people and institutions integral to the promotion of LLL (Field and Tran, 2018). For this publication, we will focus on community libraries and prison libraries.

The community library is an alternative library model that has been mobilized in marginalized areas without public funding. It is best described as local people establishing their own libraries to serve the community. More often than not, community libraries are small institutions that respond to the specific needs of the people who use them. Moreover, by welcoming people of all literacy abilities with relevant materials and outreach activities, they improve people's quality of life while protecting local and Indigenous knowledge. Whether organized by a community group, church or school, community libraries all prioritize the needs of local people, meaning that no two community libraries are exactly the same (Shrestha and Krolak, 2015).

Another example of libraries reaching out to marginalized groups are prison libraries. In prison, a library provides a space for inmates to engage in LLL during the often long periods of time at their disposal. Activities including reading, participation in group events, borrowing books and other resources, and carrying out research can be carried out in a safe, quiet environment. Efforts to target prisoners who have low levels of literacy or are from non-native language backgrounds are common. By promoting a culture of reading and learning, prison libraries encourage people who typically have low levels of education to become lifelong learners.

Box 3.6. — Rural and prison libraries

In the United Republic of Tanzania, rural community libraries have received renewed support. Established in the 1970s, many of these institutions fell into neglect over subsequent decades but are now receiving more attention as part of a national initiative to promote adult literacy. In addition to mobile libraries, community libraries are playing a role in the national 'Yes, I Can' campaign, which originated in Latin America before being rolled out across the country. Yes, I Can oversees the delivery of pre-recorded literacy lessons through mass media; accompanying teaching materials and textbooks are housed in rural libraries, where literacy classes are also held. Similar campaigns have been implemented in Timor-Leste and Aboriginal Australia, enabling LLL for rural populations with low levels of literacy.

Another successful library example can be found in Bastøy, a minimum-security prison in Norway, where prison libraries are branches of local public libraries and are therefore organized professionally. Inmates at Bastøy prison are allowed to borrow books from any library in the country; they also have limited access to online educational resources as part of the prison's educational programmes. Bastøy prison is designed to prepare inmates for everyday life outside of prison, and the prison library works towards this principle. Before being incarcerated, many prisoners had never used a public library before. It is therefore the desire of the prison librarian to show inmates how to use a library so that they can continue to take advantage of this public service once they are released.

Sources: UIL, 2018; Boughton and Durnan, 2014; Krolak, 2019; Bolt and Ra, 2018

Box 3.7. — Study circles in the Republic of Korea

Two cases of study circles in the Republic of Korea show how this small-scale form of LLL can meet different learning needs. The first is taken from Uijeongbu City, where the Uijeongbu Mom Sam ('mother teacher') Atelier brings together mothers who want to learn more about good parenting. It was formed in 2006 and pursues 'pleasurable childcare and happy education' by organizing social activities and fostering a culture of community learning. As part of the Uijeongbu Lifelong Learning Exhibition, the group organizes a family play camp involving games and lectures on parental mentoring. The group also reaches out to the community and performs voluntary services including cooking and childcare (Yoon, 2020).

In Osan City, a study circle has been established to support those with low levels of literacy. The Osan City Literary Workshop aims to help people from this target group become passionate about learning by providing them with experiential learning opportunities. The principles of LLL are reflected in the workshop's recruitment of participants: those who benefit range in age from their 30s to their 60s and come from different backgrounds. Organizers of the study circle bring their practices and experiences to the National Literacy Teacher Conference each year and collaborate with adult literacy instructors in other cities to share effective methods (Moon, 2020).

Study circles

Study circles are loosely organized learning communities, often hosted by community centres. They are typically small collectives of individuals who meet regularly to debate or discuss issues of relevance to their community. Rather than focusing on a hobby or activity, as social clubs usually do, study circles focus on a problem, opportunity or issue that their members wish to

understand and examine for the benefit of the local area. The idea is rooted in a democratic understanding of self-directed learning and has long been associated with social movements. Study circles are increasingly recognized as a means of organizing LLL within a locality, and feature in a growing number of policies formulated by governments, international bodies and civil society organizations. Founded on the principle of voluntary participation, they constitute one of the most fundamental, locally based forms of community-oriented learning. As such, they may contribute to civic education in the community or support projects to improve local infrastructure (Duke and Hinzen, 2020).

Family learning

Compared to the learning environments introduced previously, the family constitutes the smallest unit for collective learning. The concept of family learning is centred on intergenerational communication and therefore complements LLL. It recognizes that learning-focused interaction between members of the same family or community supports the development of life skills, particularly literacy (Hanemann, 2015). While the purposes of family learning are manifold, for this publication we will focus on literacy as a key element of family learning.

It is never too early or too late to start literacy learning. Disadvantaged parents who lack strong literacy skills need targeted support to translate their ambitions for their children into reality. In multilingual and multicultural contexts, they may also need help learning the language of the school. Programmes that provide literacy and general parenting support often emphasize a 'whole family' approach to literacy and learning, whereby parents (re)discover literacy alongside their (pre-)school-aged children. Early intervention is critical to prepare children for school and to prevent them from dropping out. It can also have a longer-term impact on young people who need persuasion to remain engaged in education, training or employment.

It is unrealistic to rely on schools as the only solution: families and communities need to become integrated elements of a more holistic strategy. Different contexts, target groups, learning needs, and

institutional settings and capacities have resulted in the development of many different types of family learning programmes (ibid.). A common model has three components: adults' sessions, children's sessions and joint sessions during which adults and children develop activities together. Programmes typically operate from local pre-schools and primary schools, community- and faith-based institutions, neighbourhood organizations and adult learning providers. Promoting partnerships and cooperation among these institutions can strengthen connections between schools, families and communities. By building on literacy practices and strengths already present in families, successful family learning programmes can ultimately lead to more social cohesion and community development.

Quality and relevance of non-formal and informal learning

The diversity and flexibility embedded in the administration, organization and implementation of non-formal learning has created potential to cater for specific learning needs that cannot be realized easily in the formal educational setting. The diversity and flexibility of non-formal and informal learning have also presented challenges associated with quality and relevance.

There is much research on the impact of different factors on quality; this research is applied to inform the choice of strategy to improve quality in non-formal learning provision. As a prerequisite, a basic level of input (teachers, curricula and materials, equipment, enabling environments, etc.) is indispensable for any system to function properly. In several countries, these inputs are not yet fully available, even in the formal education system. Evidence shows that a minimum package of core inputs is needed for any system or programme to provide education of a decent quality. For non-formal learning provision, this minimum package would include at least two components: improving the effectiveness of teaching personnel; and improving curricula and learning materials for non-formal learning provision. These two components deserve particular attention when designing LLL implementation strategies for non-formal learning provision. We will therefore examine them here.

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Box 3.8. — Lifelong learning villages in Mali

In Mali, lifelong learning villages were established by Association Jeunesse et Développement du Mali, an NGO promoting young adults' engagement in development, under the acronym VITAL ('Village d'apprentissage tout au long de la vie', French for 'lifelong learning village'). Within these villages, vocational training and learning circles facilitated the acquisition of knowledge in relevant vocational fields, including agriculture, through the development of literacy skills (UIL, 2015a). Within each circle, literacy resources were shared as modules and handouts providing theoretical and practical information on a given topic, for example maize production. In this case, the modules covered the history, legal aspects and potential future developments of maize production as background knowledge. The circle also shared marketing advice to give participants practical ideas for improving their vocational livelihood. Circles generally consisted of around 30 people who met two or three times each week – a flexible enough arrangement to support participation by those in full-time work – and were led by trained facilitators. As an economic outcome, the villagers who took part went on to make a profit from independently made soap and dyed clothes; increases in maize production were also observed (UIL, 2015a).

Improving effectiveness of teaching personnel: In many reports (e.g. UIL, 2009, 2013 and 2016), the quality of non-formal educators is cited as a key challenge: adult educators were inappropriately trained, held minimal qualifications, were underpaid and worked in unfavourable conditions. While some countries require not only postgraduate qualification but also a certain number of years of experience, in many other countries, secondary education or even less is enough to qualify as a non-formal educator. Specifically designed initial and continuing education programmes for adult educators at higher education levels remain sparse. There is increasing acknowledgement of the strategic

importance of investing in the professionalization of non-formal educators to improve the quality of non-formal learning services.

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Box 3.9. — Using Curriculum globALE to train adult educators in Lao PDR

Curriculum globALE is a globally applicable framework for the training of adult educators. It was initially developed by DVV International in cooperation with the German Institute for Adult Education – Leibniz Centre for Lifelong Learning (DIE). It is now being developed further in collaboration with UIL and the International Council for Adult Education (ICAE).

Curriculum globALE has three main principles: competency orientation, action and participant orientation, and sustainability of learning. The framework is applicable globally because its modules can be adapted to specific national contexts and contain cross-cutting issues, e.g. a gender-sensitive approach, emphasis on sustainable development and climate change, and a focus on humanistic and democratic values.

Learning formats include taught units, individual self-study and practical work, alternating for the participants to ensure a strong linkage between theory and practice, knowledge and doing. Curriculum globALE was adapted – or 'localized' – to the national context of Lao People's Democratic Republic between 2015 and 2017. Though the framework was developed at the international level, it was contextualised through a series of actions: designating a mixed team of international and national experts to plan and implement the training, appointing Lao trainers to deliver the vast majority of training in the Lao language, and merging training with mentoring to strengthen the link between capacity-building and implementation.

Sources: DVV International, 2020; Gartenschlaeger, Khounvixay and Saleumsouk, 2019

Box 3.10. — Increasing quality and relevance of learning materials through a national consultation in Mexico

In an effort to ensure the quality of its adult education programmes, the National Institute for Adult Education (INEA) in Mexico convened a national consultation to review the contents of its MEVyT (Education Model Life and Work) modules. The consultation was carried out through regional and state forums, in which more than 3,000 people participated, including authorities from the State Adult Education Institutes (IEEA) and INEA delegations, educational services personnel, area coordinators, teaching technicians, advisers and learners. The aim of these forums was to review both the focus and relevance of the educational content and the didactic activities of the Spanish-language materials.

The participants of these forums discussed the revision of 18 basic modules and 32 diversified modules. The forums focused on the needs of three population groups in particular: young people, those aged 20 and over, and those aged over 60. In addition, special consideration was given to the needs of vulnerable populations served by the INEA through the MEVyT programme, namely the bilingual Indigenous peoples, the visually impaired population, and primary school-aged out-of-school children, as well as adolescents aged 10 to 14. The recommendations resulting from this discussion guide the development/revisions of the modified materials.

Source: Gobierno de México, 2017

Improving curricula and learning materials for non-formal learning provision: By developing links across different age groups and generations, and between formal and non-formal settings, as well as by connecting education policy with social, health, employment, environmental and agricultural policy agendas ('cross-sectoral approach'), non-formal learning provision can achieve much to ensure relevance to learners. This requires curricula and materials specifically designed for learners. These materials must be open to and draw on diverse information sources, and must be adaptable to local realities and different target groups. Adult learner participation in the definition, design and/or review of non-formal learning programmes not only increases the likelihood of the programme's relevance for learners, it can also increase learners' interest and motivation. For example, the process of developing culturally, linguistically and gender-sensitive curricula and learning materials for literacy programmes works best if relevant stakeholders are consulted, especially potential learners, and if it allows for local or even personalized adaptations. This increases ownership and the probability that the programme will be accepted and followed by all.

Non-formal and informal learning in LLL implementation strategies

There are several factors influencing the core processes of non-formal and, to a lesser extent, informal learning – namely relevance, quality assurance, learning outcomes and research. *Table 3.3* presents these factors as main considerations for LLL implementation strategies for non-formal learning provision.[2]

2 As many kinds of informal learning are unintentional and cannot be planned, Table 3.3 contains practical guidance for non-formal learning provision.

Table 3.3. Key considerations for LLL implementation strategies – non-formal learning

Relevance	• Ensure non-formal education programmes covered by the LLL implementation strategy are relevant to learners by representing an effective route to, and support for, personal and social transformation. • Identify the positive influence of increased relevance of learning opportunities on participation and inclusion. • Consider which knowledge, skills, attitudes and values (competencies) are relevant for specific learners, and at which levels. • Consider the learners' perspectives by involving representatives of target groups actively in programme development. • Evaluate teaching and learning processes, relationships and methodologies of non-formal learning provision, ensuring they are effectively tailored to the needs and aspirations of the learner.
Quality assurance	• Put non-formal educators and their professionalization in focus to improve and ensure quality and effective M&E frameworks and systems. • Recognize how professionalization goes beyond educators to include managers/leaders of non-formal learning institutions. • Plan for the implementation of standardized M&E frameworks to enhance quality.
Learning outcomes	• Evaluate the effectiveness of non-formal learning provision, i.e. learning outcomes, time and other resources needed to achieve the programme aims. • Understand how the measurement of learning outcomes plays a role in quality, financing and accountability. • Identify ways in which RVA of non-formal and informal learning outcomes makes diverse learning experiences visible and valuable. • Explore how the formative aspect of assessment can be strengthened to motivate learners.
Researchs	• Gather evidence on the factors that impact quality the most (best practice) and use it to enhance quality management in non-formal learning provision, considering the causal chain between input, process, output and outcome. • Determine how action research can become part of professional development and quality assurance.

Source: UIL and IIEP, 2020, Module 3, p. 25

Establishing flexible learning pathways

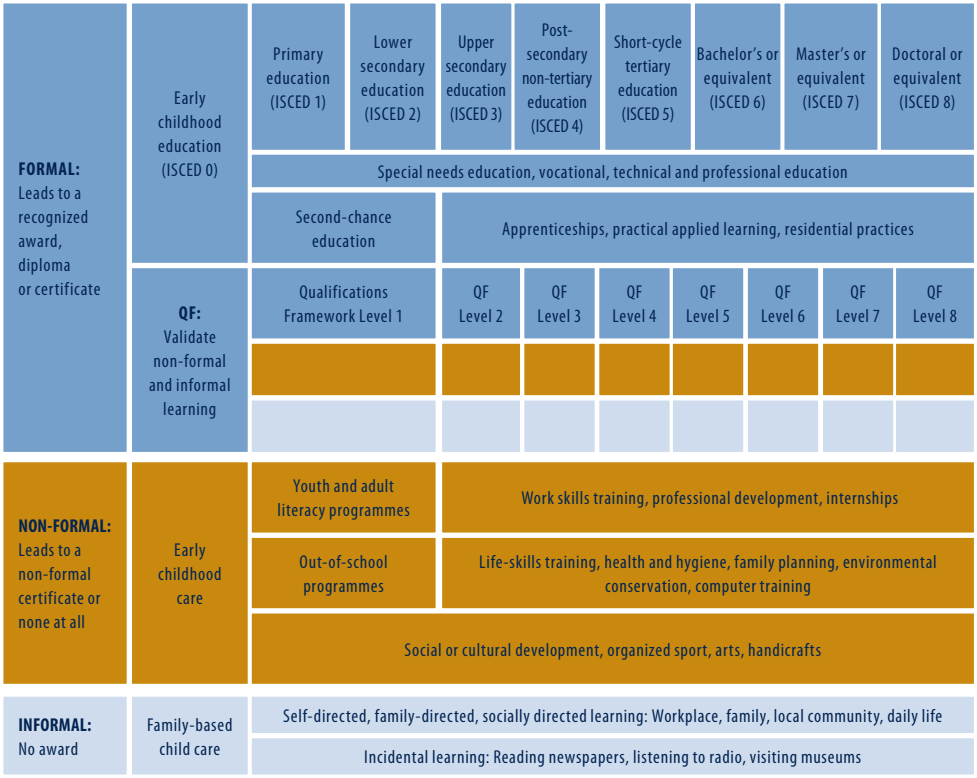
Since LLL includes a wide variety of learning opportunities, policy options may represent more than one modality, i.e. any combination of formal, non-formal or informal learning modalities. Interventions aimed at promoting flexibility, such as flexible learning pathways, enable learners to transition within and across formal and non-formal education, training and employment.

The model represented in *Figure 3.1* identifies and classifies different characteristics of LLL that may affect implementation. By showcasing a spectrum of learning across age groups, levels of education, modalities, spheres, spaces and purposes, the model is a visual representation of the five essential elements of UNESCO's understanding of LLL, as introduced at the beginning of Chapter 1.

The model identifies commonalities across levels, potential interventions and engagement by stakeholders, as well as other factors significant to the implementation process.

To ensure that the needs of all learners are met, the Education 2030 Agenda promotes flexible, student-centred education provision that encourages the pursuit of diverse learning pathways. SDG 4 urges countries to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (UN, 2015). This vision recognizes the importance of providing flexible learning opportunities for people of all ages. Learning pathways denote the ways in which we navigate and sequence our learning, skills development, education and training to attain competency towards a qualification or part-qualification within an occupational or academic context (Lotz-Sisitka and Ramsarup, 2017). These pathways are numerous, multifaceted and inherently unique to each individual. Enabling a seamless learning pathway is complex and dependent upon a number of systems, including schooling, career guidance, post-school opportunities, training opportunities, workplace learning and work experience, as well as the formal system of skills provisioning.

Figure 3.1. Overview of LLL opportunities



Source: UNESCO, 2016a

The implementation of flexible learning pathways is a complex process, influenced by a number of factors at the national, institutional and even individual level. At the policy level, flexible learning pathways refer to the possibilities that learners have to transition between different stages and programmes of formal and non-formal learning, while acknowledging the importance of informal learning. Moreover, they exemplify the growing complexity of the learning landscape as education providers shift from highly demanding (both in terms of time and resources) credentials and certifications to macro-degrees (typically broad-based qualifications that can be shown through a degree or

a certification) and micro-credentials (also referred to as alternative credentials, digital badges and micro-certifications, among others, and covering two main aspects: learning activities that lead to a credential, and the credential itself [European Commission, 2020]). Overall, an adequate mix of policies and steering instruments is needed to create an enabling environment for flexible learning pathways. These holistic systems should be made up of 'building blocks' that meet the needs of different learner groups, including the most disadvantaged, and are essential for the operationalization of LLL.

Learning pathways rely on 'articulation', which can be defined as a 'set of actual connections between different learning pathways at the horizontal level, and the vertical transitions from one level to the next' (Hoppers, 2009). It is an essential principle for creating an integrated system of flexible pathways. Articulation creates the 'bridges' and 'ladders' that allow people to move through the system in accordance with their (changing) circumstances and needs. It can be visualized in national qualifications frameworks as well as in the mechanisms for the RVA of non-formal and informal learning outcomes.

More specifically, articulation can be grouped into three distinct categories: systemic, specific and individual. At the systemic level, articulation refers to linking existing qualifications, professional designations and programmes for workplace learning (among others) in and across national education systems. To operationalize systemic frameworks, specific articulation mechanisms are needed, including RVA, credit accumulation and transfer schemes (CAT), and memorandums of understanding, among other inter-institutional arrangements. At the individual level, articulation comprises diverse forms of learner support, such as support on learning-and-work pathways through career advice, flexible learning and teaching provision, as well as a variety of supportive programmes and structures.

By promoting opportunities for second-chance schooling and equivalency programmes, flexible learning pathways ensure openness, inclusiveness and flexibility in the education system, enabling ways forward without dead ends. As mentioned, flexible learning pathways can be articulated in national

(and regional) qualifications frameworks as well as in regulations and mechanisms for RVA. Flexible learning pathways lie at the heart of LLL: by facilitating the interconnectedness of initiatives across formal, non-formal and informal learning modalities, they make learning systems more comprehensive so that they are better able to meet the needs of learners.

National and regional qualifications frameworks

In the twenty-first century, with globalization, technological advancements, migration and other trends affecting the world around us, relations between education, training and work have evolved and become increasingly complex. National qualifications frameworks (NQFs) have been developed globally in response to this as they classify qualifications by level, based on learning outcomes. This classification reflects the content and profile of qualifications – that is, what the holder of a certificate or diploma is expected to know, understand and apply. The learning outcomes approach also ensures that education and training subsystems are open to one another: this allows people to move more easily between education and training institutions and sectors (Cedefop et al., 2017).

NQFs can be found in countries around the world, irrespective of their development status and economic strength. In most cases, NQFs not only classify qualifications; they invariably imply a vision that redefines the way qualifications relate to one another and how they are applied and valued in societies. Regional qualifications frameworks (RQFs) are regional equivalents to NQFs, which can be found in the Asia-Pacific region, Europe, the Caribbean and Africa. By providing an overarching framework for classifying qualifications, RQFs simplify the process of linking qualifications across countries.

The number of NQFs has grown rapidly. An overview of national and regional frameworks is captured in the Global Inventory of Regional and National Qualifications Frameworks (Cedefop et al., 2019). In the 2017 report for this global inventory, it was confirmed that 'more than 150 countries worldwide are now developing and implementing qualifications frameworks' (Cedefop et al., 2017, p. 8) and, in 2019, 'numbers of frameworks, national and regional, remain stable, while implementation of most

frameworks has deepened and widened since 2017' (Cedefop et al., 2019, p. 9). Their initial emergence was informed by perceptions of fundamental changes in the global economy, which had implications for the traditional divide between education and training, and for the formal recognition of workplace and life experience. These views complemented those of business and government, which saw qualifications frameworks as a means of making education more relevant to the workplace, and as a steering mechanism by which the state could achieve social objectives such as educational reform and equity.

Despite the fact that the NQF has developed as a relatively uniform policy movement and that NQFs around the world share similarities as a result, it is possible to identify different types by analysing two criteria: objectives and scope. Depending on their objectives, NQFs may be classed as one (or a hybrid) of the following, as defined by Raffe (2013):

- A communications framework – its main aim is to improve the transparency of an existing system and make it more coherent by identifying potential pathways for learning progression without directly trying to change the system itself.
- A transformational framework – at the other end of the spectrum, this type of NQF aspires to establish a new qualifications system by envisioning how things should be, rather than how they are, in an attempt to move the existing system in that direction with a tighter, more centrally led outcomes-based design.
- A reforming framework – this type lies somewhere between the previous two. It pushes for changes to the existing qualifications system by, for example, increasing regulation, improving the consistency of standards and/or plugging current gaps in learning provision.

It is also possible to differentiate NQFs according to scope. Many NQFs are 'comprehensive frameworks', i.e. they capture qualifications belonging to all parts of the education and training sectors in a given country and often seek to integrate a variety of subframeworks, even if they feature different designs (ibid.).

Alternatively, some NQFs are 'non-comprehensive' and address only one subsector of education and/or training in the country. This is the case in

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Box 3.11. — Ghana's NTVETQF

Ghana's National Qualifications Framework was formulated in 2012 to cover TVET, and thus addresses both the country's education sector and labour market. It is designed to both articulate existing qualifications available in the country and trigger a process of reform affecting education and the economy. The NTVETQF has the following objectives:

– to bring all post-basic, occupation-oriented qualifications together under a unified qualifications framework;
– to facilitate access to further education and training for individuals in technical and vocational occupations;
– to improve product and service quality by ensuring uniform standards of practice in trades and professions;
– to promote access to LLL for all, especially those working in the informal economy.

With these objectives, the aim is to create a standard of equivalence for, and articulation between, TVET-related qualifications at the basic level and beyond. The NTVETQF is designed to drive fundamental reform by widening access to further training and education, as well as precipitating an improvement in quality of services provided by the extensive informal economy in Ghana. The NQF acknowledges formal, non-formal and informal learning from a LLL perspective and is coordinated by the Council for Technical and Vocational Education and Training (COTVET), which is a semi-autonomous body of the Ministry of Education.

Sources: UIL, n.d.; Mikulec et al., 2020

Ghana, where the National TVET Qualifications Framework (NTVETQF) is the only NQF and, as its name suggests, covers only the TVET subsector. A limited scope does not, however, preclude an NQF from accommodating non-formal and informal learning outcomes: the second volume of the 2017 Global Inventory of Regional and National Qualifications Frameworks (Cedefop et al., 2017a) explains that Ghana's NTVETQF supports the 'validation of informal and non-formal learning' and promotes 'access to lifelong learning for all, especially those working in the informal economy' (ibid., p. 225).

Of the three learning modalities detailed in this handbook (formal, non-formal and informal), formal learning is more oriented towards certification and the awarding of qualifications. In recent years, qualifications from formal learning have been systematically classified and harmonized through NQFs in countries around the world. This is useful for learners who are enrolled in or have already completed formal learning programmes and are seeking further learning opportunities. However, the primary objective of an NQF is to assist the transitional processes between learning modalities and learning programmes. A major challenge in the ongoing formulation and reform of NQFs worldwide is thus the integration of qualifications or credentials that may be acquired, to at least some degree, through non-formal and informal learning. For this to happen – for such learning to be made visible and eventually validated and accredited – non-formal and informal learning outcomes require recognition.

Recognition, validation and accreditation of learning outcomes

The RVA of the outcomes of non-formal and informal learning is one of the pillars of any LLL policy. The UNESCO guidelines on RVA define it as a 'practice that makes visible and values the full range of competences (knowledge, skills and attitudes) that individuals have obtained in various contexts, and through various means in different phases of their lives', leading at times to the acknowledgement of their value in society (UIL, 2012, p. 8). It comprises three main elements:

- **Recognition** is a process of granting official status to learning outcomes and/or competences, which can lead to the acknowledgement of their value in society.
- **Validation** is confirmation by an approved body that learning outcomes or competences acquired by an individual have been assessed against reference points or standards through predefined assessment methodologies.
- **Accreditation** is a process by which an approved body awards qualifications (certificates, diplomas or titles); grants equivalences, credit units or exemptions; or issues documents such as portfolios of competences on the basis of an assessment of learning outcomes and/or competences according to different purposes and methods. In some cases, 'accreditation' applies to the evaluation of an institution or programme's quality as a whole.

While UNESCO has been using the term RVA to refer to skills recognition, there is a wide array of terms to describe recognition and validation practices across countries. In the United States of America, for example, RVA is referred to as prior learning assessment and recognition (PLAR). In the UK, the terms accreditation of prior learning (APL) and accreditation of prior experiential learning (APEL) are used. Other commonly used terms are recognition of prior learning (RPL) and validation of prior learning (VPL).

RVA is a crucial step towards the realization of LLL, and has many advantages for learners. At its core is the principle that there is value in providing visibility to previously unrecognized learning outcomes, not least because it may boost learners' self-esteem and motivation to continue learning, which, in turn, leads to greater well-being and potentially more job opportunities (UIL, 2012). RVA may also help to integrate broader sections of the population (e.g. early school leavers and workers in the informal economy) into an open and flexible education and training system, and thus contributes towards building an inclusive society.

To operationalize RVA, the UNESCO guidelines (UIL, ibid.) identify six key areas of action at national level: (1) establishing RVA as a key component of a national LLL strategy, (2) developing RVA systems that are accessible to all, (3) making RVA integral to education and training systems, (4) creating a coordinated national structure involving all stakeholders, (5) building the

Box 3.12. — Overarching approach to validation in France

In France, the Validation des Acquis de l'Expérience (validation of experience or VAE) system has been maintained through national legislation and decrees since 2002; it thus has a clearly defined legal framework and exists as an individual's legal right. The system facilitates the RVA of non-formal and informal learning outcomes by providing a route towards qualification acquisition for individuals who have engaged in and completed a learning experience without receiving some form of certification. Instances of previous learning in a range of contexts can therefore result in the achievement of part or all of a qualification through the VAE system.

As a legal right, individual employees may take training leave to pursue recognition through the VAE system, while employers can initiate collective VAE processes for groups of employees. Such processes may also be implemented with individuals seeking employment. VAE in France applies to many different types of qualification, whether vocationally oriented or as products of general education, including qualifications given or accredited by government ministries, and sectoral qualifications such as the Certificat de Qualification Professionnelle (certificate of professional qualification or CQP).

The VAE system connects individuals with the wider European education system and labour market: the qualifications it leads to are found in France's national qualification directory (RNCP) and correlate to levels three to eight of the European Qualifications Framework (EQF). Furthermore, VAE is widely regarded as a strong system because its qualifications are equal in value to those achieved by participants in formal vocational education and training programmes. The validation procedure is comprehensive and includes the identification, documentation and assessment of learning outcomes, followed by an official certification of learning awarded by a jury.

As of 2017, more than 307,000 qualifications had been awarded as a result of VAE, and approximately 1,300 qualifications were accessible through the system.

Source: Cedefop et al., 2017

capacities of RVA personnel, and (6) designing sustainable funding mechanisms. Today, evidence of good practices to advance RVA can be found in countries around the world.

While many countries have started the process of developing national frameworks and mechanisms for RVA, the ways in which they are established vary widely at national, regional and local levels. To provide an overview of national approaches, regulations and governance mechanisms for RVA, UIL has established a global observatory with country profiles (UIL, 2022a). A set of specific case studies from different sectors complements the observatory by offering insights into RVA practices and challenges around the world.

As the observatory shows, influencing factors include national contexts and the degrees of involvement of government bodies, private sector organizations and individuals. Consequently, different forms of governance are evident in different countries: examples include social partnership models, stakeholder models, and RVA coordination through NQFs. Some countries, such as Norway,[3] have established national institutes under their respective ministries of education, which cooperate with trade unions, enterprises, colleges, universities and others. Some of their roles include developing guidelines for validation towards enrolment in tertiary vocational education and exemption in higher education. Such arrangements recall the features of multistakeholder governance arrangements for LLL policy-making (see Chapter 2).

Linking the efforts of all stakeholders and national authorities is essential for delivering access to education and recognition of a wide range of competences. RVA demands that systems work together to allow learner mobility between different programmes associated with education, training and work. Building the professional expertise and capacities of educators, assessors, counsellors and administrators involved in RVA is another important dimension of ensuring the quality of RVA processes and procedures (Cooper and Ralphs, 2016).

3 Skills Norway is the Directorate for Lifelong Learning in Norway and is part of the Ministry of Education and Research (https://www.kompetansenorge.no/english/).

Information, guidance and counselling services clarify RVA procedures for individuals and ensure that opportunities for RVA are actually used by learners. Such support structures introduce individuals to recognition practices and benefits, along with how they work and how to prepare for them. Support should be easily accessible for all, online and face-to-face, and should reach out to the most disadvantaged groups in particular.

Financing and legislation to incentivize RVA varies widely among countries. In France, for example, recognition of prior learning is a constitutional right, which in turn secures basic funding. In other instances, RVA is an unfunded mandate which institutions choose to cross-subsidize. While different LLL elements may lend themselves to shared financing by way of donor grants and public partnerships, allocation of real public funding to support RVA is essential in most national contexts. Achieving adequately funded and coordinated RVA mechanisms takes dedicated political, pedagogical and organizational work by LLL champions and advocates.

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Box 3.13. — RVA for migrants and refugees

RVA of non-formal and informal learning outcomes is a critical element of LLL. Madhu Singh (2018) highlights the value of RVA to refugees, explaining that it is a 'means of empowering them, for example to gain a qualification, to enter employment or to escape poverty and social exclusion' (ibid., p. 13). However, many recognition systems are still too underdeveloped or fragmented to meet migrants' needs. In a survey of 13 European countries, only a minority of highly educated migrants had applied for recognition; they may be unable or unwilling to invest in complex, time-consuming and costly processes. Furthermore, the procedures and agencies involved in official recognition and validation vary between regulated and non-regulated professions. Identifying, documenting, assessing and certifying skills and competences involves multiple government departments and subnational authorities. Recognition bodies are frequently disconnected from bodies responsible for integration and employment.

In 2012, Germany passed a federal law to streamline recognition of professional qualifications. Foreign nationals can gain recognition

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regardless of residence status or citizenship. They can make a legal claim for recognition and receive a decision within three months. Professional qualifications obtained abroad are checked for compatibility with German professional requirements.

In addition to passing laws to improve RVA systems, national and regional governments can introduce measures to ensure assessment agencies, licensing bodies and academic institutions harmonize requirements and adhere to best practice. For example, Ontario (Canada) introduced a 'fairness commissioner' in 2007 to ensure fair access to regulated professions for those with foreign qualifications. In four countries hosting Syrian refugees – Egypt, Jordan, Lebanon and Turkey – processes are under way for the development of NQFs, so that qualifications based on learning outcomes and competences across all learning modalities – formal, non-formal and informal – are recognized.

Sources: Singh, 2018; Lodigiani and Sarli, 2017; OECD, 2014; Cedefop, 2016; Owen and Lowe, 2008

Flexible learning pathways in LLL implementation strategies

Facilitated by NQFs and RVA, flexible learning pathways are designed to provide different learning options to communities needing to achieve relevant knowledge, recognize previous experiences or transition into and between learning programmes within and across different learning modalities. Establishing a holistic system of flexible learning pathways to ensure continuity of learning throughout life is a complex effort requiring national regulations; stakeholder commitment in the field of education, training and work; and sufficient funding. Capacity development of RVA practitioners, quality assurance mechanisms, and accessible information and guidance services for learners are also crucial to ensure the effectiveness of learning pathways. *Table 3.4* features some of the aspects to be considered when designing an implementation strategy that addresses flexible learning pathways.

Table 3.4. Key considerations for LLL implementation strategies – flexible learning pathways

National frameworks and mechanisms	• Integrate RVA as a key pillar in the national LLL policy or strategy. • Establish an NQF and link RVA arrangements to it. • Establish regulating bodies and a national coordination point to implement flexible pathways (provision, advocacy, quality assurance, monitoring). • Develop approaches to increase interaction between educational institutions, enterprises and the civil society sector to translate learning outcomes from working and life experiences into credits and/or qualifications.
Accessibility and support structures	• Develop procedures that identify, document, assess, validate and accredit learning outcomes, particularly those gained outside of formal education and training institutions. • Make use of both formative assessment (identification and documentation of the learning progress) and summative assessment (validation of learning outcomes leading to qualification). • Offer information, guidance and counselling services to clarify RVA procedures and available learning pathways for all individuals, accessible online and face-to-face. • Provide special support with flexible arrangements to disadvantages groups. • Provide a single-entry point for RVA procedures and services to facilitate coordination and coherence.
Stakeholder involvement	• Ensure all stakeholders have clearly defined roles and responsibilities when designing, implementing and assuring quality of the RVA system. • Communicate the benefits of RVA processes to employers and education and training providers to enhance transparency and acceptance. • Create multi-stakeholder partnerships between public, private and community-based stakeholders to develop sustainable cost-sharing mechanisms.

Table 3.4. Key considerations for LLL implementation strategies – flexible learning pathways

Quality assurance and staff development	• Establish a training system for RVA personnel to enhance their abilities to manage and conduct the assessment and validation processes in their specific socio-economic contexts. • Establish quality assurance mechanisms to ensure that assessment tools and instruments are valid, reliable and fair. • Put in place effective administrative processes for receiving applications, organizing assessment and providing feedback on outcomes, recording results, awarding qualifications and designing appeal processes.
Funding mechanisms	• Provide sufficient financial resources to build the basic infrastructure of the RVA system. • Establish a sustainable financing formula that results in fair cost distribution between the state, employers and individuals funding RVA implementation. • Make special provision for access to RVA arrangements at a reduced rate or free of charge for vulnerable groups and individuals. • Conduct cost-benefit analyses to develop evidence of the benefits of RVA for individuals, enterprises, education institutions and society as a whole.

Sources: UIL, 2012; Bertelsmann Stiftung, 2019

Advancing ICT for LLL

ICT is truly a transversal aspect of LLL: it affects every modality of implementation and is shaping the agenda in significant ways in terms of LLL implementation. Chapter 1 summarized the global trend of developments in digital technologies and its implications for LLL. In terms of LLL implementation, the advancement of digital technologies in recent years has opened up a new learning space, which overlaps with but is also separate to traditional learning spaces and pre-existing learning processes. This section provides an overview of how ICT can be used effectively for formal, non-formal and informal learning. It also reinforces the point made throughout this handbook that the boundaries between learning modalities are becoming increasingly blurred. In fact, this is in large part precipitated by the increased use of ICT, which extends its reach from formal and non-formal learning programmes (e.g. language courses) into informal settings (e.g. learners' homes) and likewise brings tools for informal learning (e.g. mobile devices) into formal learning environments (e.g. schools). This section also highlights the value of interventions to promote ICT for LLL, particularly through national digital strategy development.

Using ICT for LLL

Here, we provide an overview of the ICTs being used across different modalities of LLL and for the benefit of particular groups. We then introduce open educational resources (OER) and massive open online courses (MOOCs) as two specific types of initiatives to widen access to knowledge and learning through ICT.

Modalities of learning

Increasing the availability and use of ICT carries advantages for all modalities of learning. In the formal sector, equipping schools with new technology opens up new worlds of enquiry and knowledge sources to pupils, whose learning quickly extends beyond the school environment even while sitting in a classroom. For universities, ICT introduces flexibility into previously rigid study programmes and makes higher education more accessible to students restricted by geography, time or other work and

life commitments. By extending technology into homes and community learning centres around the world, ICT delivers and enhances non-formal learning tailored to the needs of individuals and local communities. Finally, a proliferation of applications and information, available across a growing range of electronic devices, equips people with a powerful tool for informal learning, e.g. by supporting unstructured literacy development and quick access to vocational information.

During the COVID-19 pandemic, the role of ICT for learning took on new and profound significance. In schools, universities and the non-formal sector, almost all forms of learning provision moved online in a dramatic acceleration of a trend that was already evident. In recent years, ICT has been increasingly integrated into formal schooling. In many parts of the world, it now complements a variety of subjects, topics and learning projects. In primary and secondary schools, there have been moves towards what the European Commission (2019) terms 'highly equipped and connected classrooms', a concept with four dimensions: digital technology equipment, network requirements, professional development of teachers, and access to digital content. According to this model, classrooms that use ICT effectively for learning can chart their course from 'entry level' to 'advanced level' to 'cutting-edge level'. While 'entry level' includes considerations such as laptops for every three students, interactive whiteboards, network connectivity, online training for teachers and educational software, a classroom at an 'advanced level' has 3D modelling software, a digital classroom management system, online communities of practice for teachers and virtual online laboratories. Finally, with the 'cutting-edge level' come laptops and e-book readers for all students, virtual-reality headsets, ultrafast broadband, increased opportunities for face-to-face professional development and well-established access to a range of digital content (European Commission, 2019).

Technology-enhanced learning can also mitigate the attendance requirements of full-time study at universities: it allows people to follow a formal course while working, enables easier delivery of materials from lecturers to students and vice versa, and connects learners to people and resources that can support their educational needs online, such as OERs.

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Box 3.14. — ICT for schooling during the COVID-19 pandemic

In Germany, there is a 'Digital Pact' between the federal and state governments to improve the use of digital technology in schools. When the COVID-19 pandemic caused nationwide lockdowns beginning in March 2020, €100 million was made available within this framework for the expansion of digital learning while schools were closed. At the institutional level, schools in Germany undertook a range of initiatives to strengthen their capacities for digital learning during the pandemic.

For example, the Max Brauer School in Hamburg made use of the Schul.cloud app: teachers uploaded tasks using the app and learners then integrated those tasks into weekly schedules with specific learning objectives. Meanwhile, at the St. Josef Gymnasium in Thuringia, central Germany, the school benefited from the strong digital credentials it had acquired prior to the pandemic: classrooms were already equipped with TVs, interactive whiteboards and projectors, while students in Grade 9 and above were given iPads to use for learning. With the use of ICT embedded in the school's operations, teachers and learners were able to quickly make the switch to online instruction and maintain high quality of learning during the lockdown.

Source: Robert Bosch Stiftung, 2021

The effective use of ICT for non-formal learning can also be seen in adult literacy and basic education programmes, which have used different technologies for decades to support adult learning and education. These include radio, television, and audio and video cassettes. More recently, digital ICT such as computers, tablets, e-readers and smartphones have spread rapidly and found their way into the teaching and learning of literacy and numeracy skills. The large spectrum of ICT includes satellite

systems, network hardware and software, as well as video-conferencing and electronic mail. Each one of these technologies opens up new possibilities to develop literacy skills from the safety of one's home and offers virtually unrestricted access to learning materials.

As the increasing ubiquity of technology encourages more and more people to make regular use of technological devices, ICT shapes informal, everyday learning in ever-expanding ways. Popular ICT-based informal learning includes podcasts and online encyclopaedias. ICT for informal learning may also include technological developments that support TVET in the informal labour market, which covers casual, temporary and unpaid work in addition to micro-, small- and medium-sized enterprises (MSMEs). Collectively, these forms of work constitute up to 95 per cent of all labour. ICT provides a medium through which those wishing to start or who are already running MSMEs can learn about good business practices. One example of this is the SME Toolkit, provided by the International Finance Corporation (IFC) in partnership with IBM, an American multinational technology corporation, which is home to a wealth of information, resources and tools to boost productivity and efficiency. By March 2015, it was used by 6 million users annually and offered content in 16 languages (Latchem, 2017).

ICT for particular target groups

For refugees who have been forced into ever-changing, uncertain circumstances, ICT in the form of mobile technology carries invaluable advantages due to its portability: it can accompany refugees as they transition between locations and provide them with opportunities for informal learning in the process. Mobile technology supports refugees' learning with access to digital resources in situations where the transportation of printed materials is not feasible. A major advantage is seen in the capacity of mobile devices to support refugees in learning the language of their host country.

For learners in rural areas, ICT can support literacy learning. This is particularly the case when ample quantities of digital devices are available and accessible to local people, and when digital learning programmes satisfy their learning needs and interests. An example of such a literacy initiative is the Talking Book project. Led by the NGO Literacy Bridge, Talking Book

has been implemented among communities of farmers in Ghana, Kenya, Rwanda and Uganda. With low-cost, programmable computers containing over 100 hours of audio content – including instructions, interviews, stories and songs – learners develop their literacy skills and acquire new knowledge about agriculture and healthy livelihoods at the same time (UNESCO and Pearson, 2018).

Initiatives to widen access

Technology extends traditional campus-based college and university services to distant (off-campus) and online modes, and has formed the basis for distance education for many years. A common approach is 'blended learning', whereby physical attendance and online learning complement one another, increasing the number of learning opportunities available to different communities.

Open educational resources (OERs) are defined by UNESCO as 'teaching, learning and research materials in any medium – digital or otherwise – that reside in the public domain or have been released under an open license that permits no-cost access, use, adaptation and redistribution by others with no or limited restrictions' (UNESCO, 2022a). In 2019, the UNESCO General Conference adopted a Recommendation on Open Educational Resources, which includes five areas of action for the use of OERs: building capacity, developing policy, encouraging inclusion and equity, creating sustainability models and promoting international cooperation (UNESCO, 2019). OERs provide opportunities for technology-enhanced learning, which in turn mitigates attendance requirements of full-time study at universities by allowing people to follow a formal course while working, enables easier delivery of materials from lecturers to students and vice versa, and connects learners to people and resources that can support their educational needs online.

In Africa, the African Health OER Network, established by health experts, features materials for health education. Using this digital resource, institutions working in the field of health science in Africa can upload materials to support health professionals, students and educators in their learning, thus helping practitioners and researchers advance their

knowledge (Hezekiah University, 2018). Delft University of Technology in the Netherlands, meanwhile, has developed an OER similarly aimed at health-related education but with a focus on sanitation and clean water. The OER offers courses on clean water technology, targeted at developing countries and subsequently updated with context-specific information on water treatment by universities across Indonesia, South Africa, Singapore and the Antilles (ibid.).

OERs make an important contribution to LLL: they enable people of all ages to access tools to enrich their lives and find out more about the world (UNESCO, 2019). Recently, they have been used to support the shift to online learning during the COVID-19 pandemic (OER4Covid, 2022).

Massive open online courses (MOOCs) accommodate unlimited participation and open access (OA) via the web. In addition to traditional course materials such as prerecorded lectures, readings and problem sets, many MOOCs provide interactive options, including forums to support interaction among students, professors and teaching assistants, as well as immediate feedback on quick quizzes and assignments.

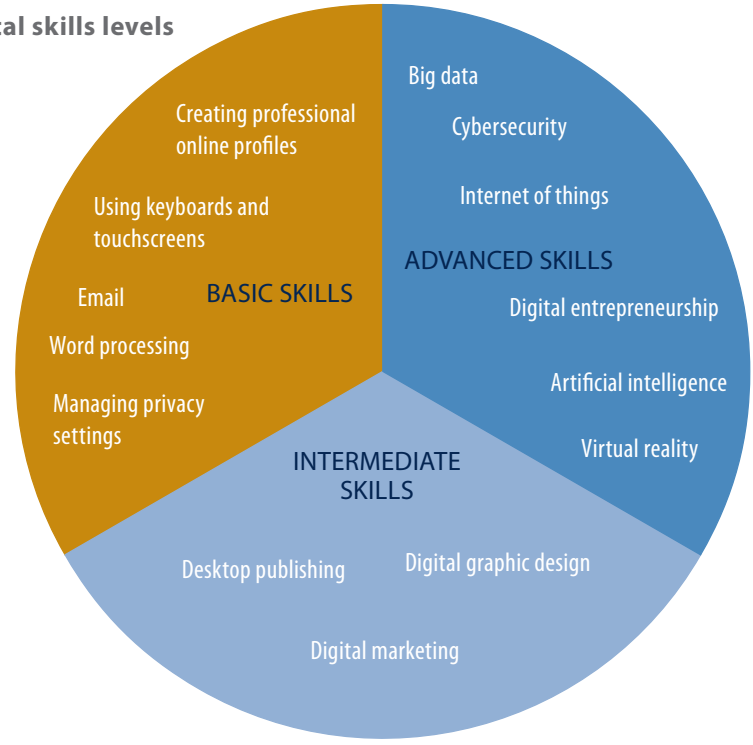
Early MOOCs often emphasized OA features such as the open licensing of content, structure and learning goals, and promoted the re-use and remixing of resources. Some later MOOCs used closed licences for their course materials while maintaining free access for students. MOOCs address issues that have a direct impact on learners' lives; however, there are limitations to MOOCs, including low retention and completion rates. Furthermore, with the growing tendency of providers to charge fees, the idea of extending free learning opportunities to large numbers of learners – the original raison d'être of the MOOC – has been compromised. Attention has recently shifted somewhat towards the small private online course (SPOC), which has been regarded by some institutions as a more manageable alternative to the MOOC (Symonds, 2019). Nevertheless, MOOCs remain a relatively recent and widely researched development in distance education, and a form of ICT for both formal and non-formal learning.

Promoting the use of ICT for LLL

While the potential of ICT to transform learning is evident, without targeted policy intervention there are limitations. This is especially true for older generations, who may find it difficult to keep up with advances in technology and are therefore at risk of being left behind. In addition, a lack of literacy skills is often connected to poverty, which may restrict access to and efficient use of technologies. Moreover, despite the seeming omnipresence of smartphones and personal computers, access to the internet is restricted in many parts of the world and particularly in rural areas.

These barriers and challenges highlight the importance of initiatives that guarantee the inclusivity of ICT for LLL. Initiatives and policies that promote ICT for LLL tend to address one of two areas (or both): digital infrastructure and digital skills. Both are necessary to enhance and widen access to learning.

Figure 3.2. Digital skills levels



Source: ITU, 2018

Digital infrastructure establishes the foundations for digital skills to thrive and, because it is defined mainly by physical infrastructure and telecommunications networks, it does not fall within the remit of education policy. Nevertheless, stakeholders and policy-makers in the fields of education and LLL should be cognizant of its importance and advocate for its development (UNESCO, 2018a). Digital skills, meanwhile, can be categorized in many different ways and, similar to literacy skills, are located on a continuum of learning. *Figure 3.2* features a simple typology of basic, intermediate and advanced digital skills.

In Chapter 1, we provided the example of the African Union's *Digital Transformation Strategy for Africa (2020–2030)* to show how a regional ICT strategy can respond to the global trend of digitalization. Within the realm of education policy, producing a strategy or 'master plan' for ICT use in education clarifies national priorities. Such documents may address technological infrastructure development within schools, but they also drive digital skills forward by advocating for teacher training in ICT and for digital technologies to become more embedded into learning curricula. However, a strategy or master plan can only be formulated and realized if there is strong political will and coordination (UNESCO, 2018a). For example, the UK has a strategy for the use of technology in education which aims to 'support and enable the education sector in England, UK, to help develop and embed technology in a way that cuts workload, fosters efficiencies, removes barriers to education and ultimately drives improvements in educational outcomes' (Department for Education, 2019, p. 5). Furthermore, this strategy proposes strengthening collaboration between the education sector and the education-technology business sector, particularly when providing technological products for education (ibid., p. 32).

Box 3.15. — Singapore's ICT-in-Education Masterplans

In Singapore, ICT-in-Education Masterplans have been renewed every five years since the first one was produced in 1997. The master plans include digital infrastructure for schools, equipping teachers with digital skills so that ICT is incorporated into teaching methods and, comprehensively, the acquisition of digital skills at every educational level. The desired outcomes are that students will become more adept at using technological devices to access, interpret and evaluate information and thus be better equipped to adapt to emerging professions in an increasingly digitalized economy. With these overall objectives, Singapore's master plans facilitate instrumental, structural/informational and strategic digital skills (UNESCO, 2018a). With the conclusion of the second master plan, which was implemented between 2003 and 2008, reported achievements included increased student and teacher competences in the use of basic ICT tools (including the internet), as well as the availability of a flexible network for schools to experiment with new technologies. 'Masterplan 3' maintained the same vision as the previous two and 'Masterplan 4' focused on quality learning before being replaced by the Educational Technology (EdTech) Plan in 2019 (Ministry of Education Singapore, 2021).

ICT in LLL implementation strategies

As ICT plays a prominent role across all modalities of LLL implementation and is found increasingly in all learning spaces, it should be taken into consideration during the design of any LLL implementation strategy, as shown in *Table 3.5*.

Table 3.5. Key considerations for LLL implementation strategies – ICT

National ICT strategies	• Identify whether there are existing digital strategies at the national level in your country. • Gauge the scope of these strategies and the extent to which they address the education sector and other relevant sectors. • Establish how the LLL implementation strategy under development can mirror or build on some of the objectives and priority areas covered by existing digital strategies.
Digital inclusion	• Consider the implications of the 'digital divide' for LLL implementation. • First, identify where and among whom this divide exists, i.e. those disadvantaged by the digital divide – the geographical areas, demographic and socio-economic groups and types of institutions, e.g. ageing populations, low-skilled learners, learners in rural areas. • Consider the technological infrastructure, devices and digital skills required for specific forms of LLL implementation. • Evaluate these digital requirements alongside the current circumstances of digitally excluded areas, groups and institutions, and highlight gaps. • Integrate initiatives into the LLL implementation strategy that are designed to fill these gaps and make ICT for LLL more inclusive. • Assess the availability of digital infrastructure and technological devices for education in your country or local area. • Consider infrastructural barriers for the extended use of ICT for LLL. • Identify any current or future initiatives designed to improve technological infrastructure or increase the number of technological devices available to learners. • Ensure that the LLL implementation strategy is realistic in its reflection of these challenges.

Digital skills programmes	• Identify how LLL implementation can foster a spectrum of digital skills including basic, intermediate and advanced skills. • Establish where and for which groups a lack of basic digital skills is inhibiting access to LLL opportunities, i.e. opportunities that involve basic hardware, software and online services. • Determine which instances of LLL implementation require or can foster intermediate digital skills, such as vocational skills development programmes involving data analysis, digital marketing or other functions beyond the use of basic software. • Reflecting on the trend of digitalization and the use of AI (see Chapter 1), anticipate how LLL implementation can encourage the acquisition of advanced digital skills, i.e. digital skills pertaining to AI, digital entrepreneurship, coding and cybersecurity. • Train teachers and educators to use ICT for teaching and learning.
Stakeholder cooperation for a holistic implementation strategy	• If the LLL implementation strategy integrates elements of a national ICT strategy, consider strengthening partnerships with relevant national authorities to boost forms of learning provision. • With regard to ICT infrastructure, devices and digital skills programmes, explore ways of harnessing the expertise and resources of other sectors, including the private sector.

Ensuring effective governance of LLL implementation

If the concept of LLL as a driver of sustainable development is to become a global reality, it needs to be mainstreamed into public policies and implementation strategies at national, provincial and local levels. This requires a holistic approach and calls for sector-wide, cross-sectoral and multi-level coordination among all subsectors of the education system: across different ministries, involving public and private stakeholders, civil society, local governments and learning providers. An important part of developing effective implementation strategies for LLL is establishing a governance mechanism and identifying the roles and responsibilities of all relevant stakeholders.

While the primary responsibility to deliver on the right to formal, non-formal and informal education lies with national governments, local stakeholders will mainly be in charge of implementation. Making LLL a reality for all is a collective effort that requires a participatory approach, representing the interests of all groups of society.

Considering the complex interrelations between different sectors and levels with their specific priorities and demands, it becomes clear that coordinating the implementation of LLL successfully can be quite challenging. It is important to understand that governance, as a way of coordinating actions among stakeholders, is supported by regulatory elements such as laws, guiding documents, principles, norms and processes; these may be defined explicitly in some cases (laws, policies) and be tacit in others (social roles and norms). To achieve effective governance mechanisms for LLL implementation, all key stakeholders, in particular policy-makers, should be aware of regulatory frameworks and political authority at different levels of government, and of the roles and decisive powers of the stakeholders involved at the local level. The degree to which LLL is embedded with established rules, structures and procedures differs widely among countries. The modalities of non-formal and informal learning are less institutionalized than those of the formal sector in particular. While in many countries, formal education is regulated through a national or provincial

curriculum with limited flexibility for local adaptation, non-formal and informal learning modalities often give local governments a wider scope for action.

Summing up, five elements can be identified for effective governance in the field of education and learning (Burns and Cerna, 2016):

- Effective governance focuses on processes, not structures.
- It is flexible and can adapt to change and unexpected events.
- It works by building capacity, stakeholder involvement and open dialogue.
- It requires a whole-system approach (aligning roles, balancing tensions).
- It harnesses evidence and research to inform policy and reform.

Chapter 3 has mapped out LLL implementation by presenting its specific areas, including formal education, non-formal and informal learning, flexible learning pathways and ICT. Examples and explanations have been complemented by key considerations for LLL implementation strategies at the end of each section. This guidance has been provided for policy-makers and other stakeholders to design a national strategy for LLL implementation.

Ultimately, the contents of the strategy should be commensurate with the national context as well as national capacities for implementation. Finally, multi-level governance plays a role at every level of LLL policy-making and implementation, including at the local level. In rural and urban areas alike, a great deal of coordination between local stakeholders facilitates LLL implementation and so it is useful to bear in mind the points raised with regard to governance while proceeding through the final chapter of this handbook.

IN YOUR CONTEXT

Implementation of LLL policies

Chapter 3 addressed the major question of how LLL policies lead to LLL opportunities for all. Its main focus was implementation, namely how the design of national implementation strategies can accommodate diverse forms of formal, non-formal and informal learning. The information provided demonstrated how national LLL implementation strategies can look across learning modalities, along with how they can encourage the creation of flexible learning pathways and involve diverse groups of stakeholders by promoting multi-level governance.

Key points:

- LLL policies are effective only when translated into practice; the formulation of LLL implementation strategies makes this more likely to happen.
- Strategies may target one or more modalities of learning and specific types of learning institutions and programmes.
- Regardless of the form of LLL implementation, there are general and specific considerations when designing a LLL implementation strategy, as articulated in tables throughout this chapter.
- An implementation strategy may focus on improving formal learning institutions' capacities for LLL by targeting, for example, learning opportunities in schools, universities or TVET; implementation strategies for formal learning should consider teaching and learning processes, partnerships and staff development.
- An implementation strategy may also target non-formal and/or informal learning by detailing measures for community learning centres, libraries, family learning and more. Important considerations include underserved populations, relevant learning outcomes and quality.
- NQFs have created some pathways for learners who are enrolled in or have already completed formal learning programmes, but they can also assist transitional processes between learning modalities and programmes, as well as between education and employment.
- Learners who have already benefited or will benefit in future from non-formal and informal learning are supported by measures for the RVA of non-formal and informal learning outcomes.
- If implementation strategies are formulated with a cross-cutting awareness of different learning modalities (formal, non-formal and informal), they can lead to the creation of flexible pathways from which all learners can benefit.

IN YOUR CONTEXT

- ICT should feature in any LLL implementation strategy as it increasingly shapes all forms of LLL implementation. Key considerations include national ICT strategies, digital inclusion, infrastructure and devices, digital skills programmes and partnerships.

Questions for reflection:

- What is the value of an implementation strategy for a LLL policy?
- For what forms of implementation might a strategy be devised? Which stakeholders will need to be involved?
- How can an implementation strategy take into account the characteristics of – and support pathways between – formal, non-formal and informal learning?

Possible actions:

Identify a LLL policy according to the characteristics presented in Chapter 2. Begin to sketch out an implementation strategy for the policy by completing the following process:

- Clarify what forms of implementation must be addressed by the strategy (i.e. where change needs to happen for the policy to meet its objectives).
- For each of the forms identified, create a list of stakeholders who must be engaged for the implementation strategy to have an impact.
- Recognize whether relevant learning opportunities to be implemented are formal, non-formal and/or informal.
- In light of this, try to address the issues to be considered for respective learning modalities directly in the design of an implementation strategy (refer to points in Tables 3.1 to 3.3).
- Take into account any other policy tools found in your national context. Determine whether there are NQFs, established procedures for the RVA of learning, or any other initiatives that may facilitate LLL implementation.
- Review the initial details you have sketched out for the implementation strategy and highlight any areas where there could be scope to support pathways to other forms of implementation (other learning modalities and/or specific programmes).
- Consider how ICT can be factored into the design of the implementation strategy and strengthen the selected form(s) of LLL implementation in the process.

Essential reading

Cedefop (European Centre for the Development of Vocational Training), ETF (European Training Foundation), UNESCO (United Nations Educational, Scientific and Cultural Organization) and UIL (UNESCO Institute for Lifelong Learning). 2019. *Global inventory of regional and national qualifications frameworks 2019, Volume I: Thematic chapters*. [PDF] Turin, ETF. Available at: https://www.etf.europa.eu/sites/default/files/2019-05/03%20P221543_Volume%20I%20-%20PROOF%202_IC%20-%20080519%20-%20x%20copies.pdf [Accessed 20 April 2020].

UIL. 2012. *UNESCO guidelines for the recognition, validation and accreditation of the outcomes of non-formal and informal learning*. [PDF] Hamburg, UIL. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000216360 [Accessed 21 April 2020].

Further reading

ILO (International Labour Organization). 2020. *Lifelong learning in the informal economy. Research brief*. [PDF] Geneva, ILO. Available at: https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/genericdocument/wcms_742004.pdf [Accessed 2 July 2021].

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UNESCO. 2018. *Global Education Monitoring Report 2019. Migration, displacement and education. Building bridges, not walls*. [online] Paris, UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000265866 [Accessed 21 April 2020].

CHAPTER 4

Teaching case study – Implementing lifelong learning at the local level using the learning city approach

GUIDING QUESTIONS

How can this handbook's guidance on LLL policy design and implementation be applied at the local level?

Which public policy issues are of particular relevance at the local level?

What are some policy innovations that can be designed for a learning city?

What are the main characteristics of policy implementation using the learning city model?

How can monitoring and evaluation support the implementation of a LLL policy in a learning city?

TEACHING CASE STUDY – IMPLEMENTING LIFELONG LEARNING AT THE LOCAL LEVEL USING THE LEARNING CITY APPROACH

In the first three chapters of this handbook, different examples of LLL initiatives were presented to highlight the main considerations when designing and implementing LLL policies. The information and examples included encourage reflection on the expected benefits, possible orientations and main challenges associated with LLL policy adoption, design and implementation. As has been described, the development and implementation of LLL policy concerns different levels of government – from national to local levels. Chapter 4 will now explore LLL at the local level, putting this handbook's prior guidance into practice by applying it to one example of a LLL policy: the UNESCO Global Network of Learning Cities (GNLC).

Strengthening LLL at the local level

LLL policies, though normally made at the national level, are often created or at least mediated at the local level. When it comes to LLL implementation, the local level is vital, as it is often the nucleus of complex stakeholder relationships that transcend levels of implementation and sectors.

Much of this chapter details the characteristics of learning cities and, specifically, the learning city model advanced by the UNESCO GNLC. Building learning cities has proven effective for enhancing access to and participation in LLL, contributing to the creation of more sustainable living environments. However, it is important to remember that, despite the increasing trend of urbanization, large proportions of the world's population live in rural areas. The global pattern of rural-to-urban migration does not eclipse the fact that almost half (45 per cent) of the world's population is still living in rural areas, with close to 90 per cent of the world's total rural population living in Africa and Asia (UN DESA, 2018). For this reason, we must also consider how LLL can be implemented effectively in cities'

surroundings and in villages. This is sometimes put into practice with a 'learning regions' designation, the scope of which extends beyond a single city to constitute a wider area in which LLL opportunities are promoted to foster sustainable regional development and innovation. To provide a consistent teaching case study, however, we remain focused on learning cities throughout this chapter.

LLL implementation in learning cities

Before focusing on the learning city model advanced by the UNESCO GNLC, it is important to note that key ideas supporting the wider learning city concept have come from a variety of cultures and are connected to early thinkers and leaders in the field of adult education and LLL (Watson and Wu, 2015). Though often led by local stakeholders, the learning city model is also a matter for national governments and should be supported by LLL policy development at the national level.

In the Republic of Korea, 'lifelong learning cities' began to develop in earnest following the Asian financial crisis of 1997; this designation was assigned to Korean cities throughout the 2000s and 2010s, promoted and supported by the Ministry of Education and Human Resources Development (Han and Makino, 2013). In China, Beijing launched its learning city agenda in 1999 to promote innovation, sustainability and inclusiveness. In 2011, Jordan's capital, Amman, launched its learning city project, a collaborative initiative between the Arab Education Forum and Greater Amman Municipality (UIL, 2015a). In South Africa, the Western Cape Province adopted the 'Learning Cape' framework in 2001 to integrate learning for people of all ages both in and out of school (Walters, 2009).

While cities differ in their cultural composition and their social, political and economic structures, they have many learning city characteristics in common. Fundamentally, learning cities consider LLL to be an effective means of addressing the specific challenges they face. They mobilize resources in every sector, draw on the strength of various partners, and connect formal and non-formal educational institutions to provide all kinds of learning opportunities that meet the diverse learning needs of their citizens. Due to the proximity of citizens and local resources,

learning cities can take immediate and customized action, respond to emergencies and address citizens' learning needs more flexibly and efficiently, especially the needs of vulnerable groups. Learning cities put people at the centre of development. They promote education and LLL for all and, with this, they facilitate individual empowerment, social cohesion, economic and cultural prosperity, and sustainability.

Along with learning cities, several other concepts for urban development have emerged in recent decades, mostly with a specific development focus such as education, health, demographic change, economic development and new technologies. These developments have resulted in a diversity of national and international networks for creative cities, smart cities, healthy cities, resilient cities and age-friendly cities, among others.

LLL policy-making and implementation through the learning city model

In 2012, the UNESCO Institute for Lifelong Learning brought the discourse on learning cities to the international level and established the UNESCO GNLC. The network started accepting membership applications in 2015 and has now engaged more than 200 learning cities around the world. The The UNESCO GNLC supports cities in developing holistic and integrated approaches to LLL, recognizing the needs of all learners, and enhancing access to learning for marginalized and vulnerable groups. It promotes policy dialogue and peer learning among members, fosters partnerships, builds capacity, and develops instruments to encourage and recognize progress in building learning cities. In 2015, the UNESCO GNLC published the Guidelines for Building Learning Cities (UIL, 2015b), a set of actionable recommendations in six areas that can be applied at every stage of the process of becoming a learning city: planning, involvement, celebration, accessibility, monitoring and evaluation (M&E), and funding.

The rest of this chapter uses the UNESCO GNLC as a teaching case study to demonstrate how this handbook's information, ideas and advice on

LLL policy-making and the design of LLL implementation strategies at the national level can be applied practically. By focusing on the local level, this teaching case study demonstrates that national LLL development both relies on and is informed by developments at the local level.

THE CITY BETA STORY

Box 4.1.

Let us imagine a city, maybe near to you and with some similarities to your own city. Why would you want to develop it as a learning city? We will call this city 'City Beta' and try to map the City Beta route to sustainable development as an example of how the learning city approach can work.

Identifying and diagnosing a public policy issue

As explained in Chapter 2, a key initial process in the design of any public policy is to define the issue being addressed. This is fundamental to identifying and communicating the reasons behind implementing a programme or intervention, as Bardach (2000) points out. A clearly defined problem includes a diagnosis of its causes, the expected changes and the potential characteristics of any intervention. Since governments face a multiplicity of challenges associated with contexts and characteristics of their communities, defining specific issues to be addressed by the learning city model can be a complex task. Local governments represent the closest level of governance to the people and are therefore the best link between global goals and local communities.

In this section, we outline three public policy issues to exemplify some of the priorities for LLL policies and their implementation: (1) urbanization, climate change and health risks; (2) the deepening of social inequalities; and (3) unemployment and lack of economic development.

Box 4.2.

How will we go about identifying the challenges of City Beta? To properly understand the policy issues, we will need to consult widely within the city, talk to the leaders of the different institutions (environmental, legal, health, education, business and industry, social services, cultural, technological, NGOs) and utilize the research capabilities of the local university to analyse the data.

Once we have the data evidence about the city, we can focus on the three public policy issues:

- urbanization, climate change and health risks;
- the deepening of social inequalities; and
- unemployment and lack of economic development.

For this exercise, we will invent the data evidence for City Beta. We must also remember to acknowledge the great things about City Beta: its fantastic sense of community and compassion towards strangers, particularly those in need, which is rare to find.

Urbanization, climate change and health risks

The rapid expansion of cities presents new problems related to sustainable development. It is estimated that, by 2030, the proportion of the world's population living in urban areas will increase to 60 per cent, compared to 55.3 per cent in 2018 (UN DESA, 2018). The urbanization trend is not only reflected in the rising number of people living in urban areas but also in the increased number of megacities – cities with 10 million inhabitants or more – which is expected to rise from 33 in 2018 to 43 by 2030 (ibid.). This expansion will result in hazards to be addressed by local governments, particularly those related to pollution and health.

Box 4.3.

City Beta is a coastal city where there is a small risk of flooding in the lower areas near to the river estuary in the east. There is recent urban development in this area, populated by a low-skilled, poor, mainly unemployed local community and migrants. Sanitation is adequate in the area provided there is no flooding. The river is polluted by fertilizer run-off from farming activities upstream and has a tendency to flash flood after storms, so east side residents are supplied with sandbags in case this happens. A large company on the bank of the estuary just outside the city boundary is using fossil fuels in its production process and creating air pollution. Solutions to these problems are not simple – the city needs the food that comes from the farming activities and the jobs created by the large company; it also needs to safely house the migrants, who are welcome and contribute in many ways to City Beta.

How can learning possibly help with these major challenges?

The COVID-19 pandemic will exacerbate the inequalities in City Beta and the east side will suffer a far higher percentage of cases than the west side. This may be due to overcrowded and multigenerational homes, less local health service provision or a lack of understanding of prevention measures. The health services in City Beta will be under great pressure and better health education for prevention and infection control will be required.

Although there is good mobile phone service across the city, the internet service is better on the west side due to investment in the business district by a large internet provider.

Even before the COVID-19 pandemic, the World Health Organization (WHO) stressed the need to invest in health and well-being as a precondition for equitable, sustainable and peaceful societies, focusing particularly on gender inequalities, groups at the highest risk of vulnerability, children's health, and linking good health to optimal social functioning (WHO Regional Office for Europe, 2017 and 2018; Watson and Wu, 2015). Local communities face challenges related to pollution, climate, health, and a combination of all three. As a result of the COVID-19 outbreak, many UNESCO GNLC members have faced severe challenges, including a record number of children and youth not attending school or university because of temporary or indefinite closures mandated by governments in an attempt to slow the spread of the virus. The COVID-19 pandemic and its effects will continue to dominate public policy issues for learning cities for years to come.

Social inequalities

As stated in a recent UN-Habitat World Cities Report, 'at this current moment of rapid urbanization and fast-paced technological change in the context of ecological and public health crises amidst deep social inequalities, cities remain the linchpin to achieving sustainable development and meeting our climate goals' (UN-Habitat, 2020, p. 180). The report also highlights that 'for more than two-thirds of the world's urban population, income inequality has increased since 1980' (ibid., p. xvii). To ensure equitable and inclusive learning opportunities for all, learning cities must address all forms of exclusion, marginalization and inequality in education in terms of access, participation, retention and completion. Learning cities also need to take concrete actions to end all forms of gender discrimination.

Another issue related to social inequality is the ageing of society. Intergenerational exchange is important to ensure social cohesion across all ages. Efforts are also needed to help fight isolation and exclusion. In both cases, involving local governments and communities by adopting the learning cities model would present an opportunity to address prevailing social inequalities.

Box 4.4.

City Beta has an ageing society and recognizes the impact this is having on its labour market. This is made evident by the recent shortage of tradespeople such as builders, carpenters, electricians and plasterers, as the existing workforce in these trades are nearing retirement age. The ageing population is also having an impact on social care and there is a shortage of carers across the city. The people in City Beta are known for their compassion and City Beta welcomes migrants and refugees, recognizing also that they may provide a solution to labour shortages.

However, the data reveal that City Beta is a city of two halves, with as much as 10 years' difference in life expectancy between the east and west sides. Investment in schools has historically been unbalanced due to greater political pressure from citizens on the more affluent west side, meaning that children on the east side must travel further to attend a good-quality school. Attendance records show that children living on the east side are at far greater risk of becoming NEETs (not in education, employment or training). The Further Education College is also on the west side, although it does provide a few apprenticeship opportunities across the city, which mainly attract boys.

The university has very few admissions from the east side communities; however, it is planning to implement initiatives to address this. Moreover, it has been forced to cease its adult education programmes due to financial constraints. There is a limited programme featuring languages and crafts for adults provided by the Further Education College, and some arts and culture LLL classes are run by the municipality; the latter mainly attracts attendees from the west side. This is in line with national trends, where it has been found that those who already have participated in further and higher education are more likely to engage in LLL.

Unemployment and weak economic development

One of the main challenges for local and national governments is guaranteeing access to employment opportunities. Although several factors are commonly cited to explain unequal distribution of labour opportunities, one that is particularly relevant to cities is the surge in migration to urban areas from rural ones, where 'the majority of the global poor live' (World Bank, 2020). These migrants are 'poorly educated, employed in the agricultural sector, and under 18 years of age' (ibid.). Taken together, these circumstances strengthen the incentive to migrate to urban regions.

THE CITY BETA STORY

Box 4.5.

There is high unemployment in City Beta's east side communities. Potential employers complain of a lack of soft skills and work ethic in relation to local unemployed people. New migrants to City Beta tend to come from rural areas and are keen to work but lack technological skills, while refugees often have language needs. A scarcity of employment opportunities in rural areas is the main reason for migration to City Beta at present.

At the same time, employers in City Beta are reporting skills shortages, particularly in the new call centre industries, which require some technological understanding and a range of soft skills. Migrants are keen to learn new skills, but it is a long way to the Further Education College across the city on the west side, with unreliable and expensive public transport routes. Employers complain that the curriculum in further and higher education does not meet their skills needs.

The large company on the bank of the estuary has just announced major redundancies due to global competition. A new employer running a call centre operation is considering expansion in City Beta but is seeking assurance that the skills it requires will be available.

Keep in mind, however, that the exact nature of unemployment will depend on the specific challenges a city faces.

These three public policy issues – (1) urbanization, climate change and health risks; (2) the deepening of social inequalities; and (3) unemployment and lack of economic development – represent priorities to be pursued by adopting the UNESCO GNLC model. As a LLL policy, this model aims to create learning opportunities for all, in formal and non-formal contexts, engaging different stakeholders, and exploring the participation of different agencies and organizations.

Design and implementation: What are the required policy innovations?

Following the policy-making process set out in Chapter 2, once a public problem has been defined, the next steps are to design policy innovations and implement initiatives.

Focus areas for learning cities

In the case of the learning cities model, which is based on problem detection and definition, six different 'focus areas' have been promoted and will be expanded on here. They include several learning environments (educational institutions, family, community, workplace, online learning), aim to increase accessibility to and participation in learning for all groups of society ('inclusive learning'), and address the conditions and motivation for LLL ('culture of learning').

We will explore each focus area in relation to policy innovations which inform the implementation of LLL in cities. Many of these points relate back to the areas of LLL implementation covered in Chapter 3.

1. Promoting inclusive learning from basic to higher education and beyond. Cities can promote inclusive learning in the education system by expanding access to education at all levels, from early childhood care and education (ECCE) to primary, secondary and tertiary level, including adult education and TVET. Furthermore, cities can support flexible learning

pathways by offering diverse learning opportunities that cover a range of proficiencies. To ensure access for all inhabitants of the city and its surroundings, support should be offered to marginalized groups in particular, including migrant families.

As shown in Chapter 3, there are many potential interventions to promote inclusive learning at all levels, across formal, non-formal and/or informal learning modalities. As specific policy goals and interventions need to be determined at this stage, it is important to focus on the areas of jurisdiction cities have in the education system. For example, in the case of formal education, it is less likely that cities will have direct control over curricula or teacher training, but they might have some responsibility for the management of educational buildings and general infrastructure, including the authority to open up school buildings after hours so they can be used by the local community, as described in Chapter 3. When it comes to non-formal education, the city may have some jurisdiction over ECCE, facilitator training or basic education curricula, and so these aspects could be addressed by a planned intervention with specific policy goals.

While many interventions to promote inclusive learning in cities through the learning city model are devised by municipal governments, higher education institutions (HEIs) also make valuable contributions and often support learning city development actively. In both aspiring and established learning cities, stakeholders in local HEIs often drive the learning city process or advise municipal governments and provide valuable resources. Though the extent of HEIs' involvement varies from city to city, important contributions are made in terms of strategy, planning, coordination and implementation. These efforts are often tied to the HEIs' 'third mission' of LLL which, as explained in Chapter 3, can also lead to an expansion of flexible learning programmes for non-traditional students.

Box 4.6.

In City Beta, it was apparent that the distribution of educational opportunities was inequal, as the schools, college and university are on the west side of the city and public transport is inadequate. The university undertook social science research in the city and was concerned by the resultant data and by the educational limitations of the few university applicants from the east side. In response, the vice chancellor called a meeting of all education providers in the city, including formal and non-formal learning institutions (see Chapter 3), to create the City Beta Learning Partnership (C3LP).

C3LP members soon realized that they also needed to include representatives from employers, the voluntary sector, the health sector, NGOs and careers services in the partnership. It was recognized that a consultation with community representatives was also required.

The university held a forum where the data evidence about the city was presented and all present agreed that solutions needed to be found. Current provision and progression pathways were mapped, and gaps identified. Employers formed subgroups according to sector and provided accurate information about the current skills that were required for their sector. Moreover, the city managers understood that the distribution of resources needed to change and so, when funding for a new primary school was agreed on, it was decided that it would be built on the east side.

Culturally, City Beta has a thriving music scene, a museum, theatre and art gallery, and it holds an annual carnival that attracts many tourists. City Beta decided to link the municipality's LLL classes to these cultural opportunities, encouraging students to attend the theatre, visit the museum and art exhibitions, and participate in the carnival.

2. Revitalizing learning in families and communities. The family is an especially important setting for informal learning, a key context in which to modify some of the social behaviours affecting communities. In addition, learning in families and local communities reinforces social cohesion and can improve quality of life for all members of society. LLL should not be confined to educational or business settings, and particular attention should be paid to vulnerable groups, including those affected by poverty, people with disabilities, refugees and migrants. An example of expected interventions may be observed in Nzérékoré, Guinea, where city-led initiatives provide inhabitants with opportunities to learn more about protecting their environment and preserving public hygiene: a wide-reaching waste management project has engaged local people and created job opportunities for vulnerable groups (UIL, 2017).

Chapter 3 provided many examples of learning in families and communities. Non-formal and informal learning initiatives such as family learning and study circles can feature in interventions designed by cities. Similarly, cities can support local institutions that foster learning in families and communities, such as community learning centres (CLCs) and public libraries. During the COVID-19 pandemic, cities have played an active role in promoting learning for public health and hygiene in local communities, demonstrating the impact of cities' interventions in this focus area. In Mayo-Baléo, Cameroon, a partnership was established between the municipal government and a local support network for the dissemination of information on COVID-19, and, in São Paulo, Brazil, the municipal government organized an emergency school meals programme when education was disrupted by the pandemic (UIL, 2021). By considering these options, specific policy goals and interventions can revitalize learning in families and communities.

Box 4.7.

In City Beta, a consultation with community representatives from the east side revealed the need for more local adult learning provision, but it was not clear how engagement with learners would be achieved. The C3LP held sessions in the shopping mall with the support of CLCs, where citizens could speak to providers about their learning needs. There was a poor response from citizens living on the east side; it was therefore evident that a different approach was required.

Having supported this exploratory outreach activity, the CLCs involved in the C3LP approached their university partners with initial findings. The university then enlisted social scientists to consult with east side residents in local cafes and other usual meeting places within the community. It became apparent that a 'parachuting in' approach would fail and that the desire for learning needed to come from the community itself. How could this be achieved?

Fortunately, as a result of the consultation, an East Side Women's Group became interested in the possibility of local adult learning classes and decided to take pre-emptive action. Members identified a health practice building that had been left vacant when the new health centre was built. By approaching the health board and proposing their plans for the building, the women managed to secure it at a nominal rent, to renovate as a location in the community for learning to take place.

The actual renovation work, undertaken by volunteers from the community, functioned as a learning activity and created a sense of community ownership. The building needed some investment to make it accessible and the municipality provided some funds, to be reimbursed by renting space in the building to learning providers. Importantly, the municipality

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also provided expert advice from its surveyors and planning department. This model worked well, and the building was soon opened and ready to hold classes.

At first, the classes were poorly attended. It became clear that the curriculum needed to be negotiated with the community. This exercise was also undertaken by social scientists from the university and teachers of adult learning classes in the CLCs. The most popular choice of course for the east side's adult residents was ICT – perhaps because it was easier to claim that ICT was not available when they attended school than it was to admit to a need for help with literacy. When a local internet provider donated free internet to the learning centre, a local employer could see the potential of the learning centre as a source of new employees and started to provide ICT skills classes. Classes related to homemaking, such as cooking and sewing, soon began, followed by craft classes such as carpentry, spinning and weaving, and basic home maintenance.

Although classes were free for all to attend, after the first flush of interest, women became noticeable by their absence. Without child care provision, mothers were finding it hard to attend, so a crèche with high-quality facilities was developed in the centre by the Women's Group, improving ECCE in the area. At the same time, the Further Education College used the crèche to provide work experience as part of the training for new ECCE workers, and some local women began the training course.

The first classes leading to qualifications provided in the centre were child care, child development and care for the older people. RVA mechanisms and credit accumulation and transfer (CAT) schemes were adopted (see Chapter 3). Space was allocated for a kitchen, which was open to the public and provided a canteen for learners and staff. The kitchen was also used as a training kitchen by the Further Education College. Learners reported that their participation in classes was changing the

attitudes of their children to learning, because they could see their parents or carers setting an example. Finally, in response to community demand, higher education access classes were developed; books were provided by the city library to support adult learning and access classes. Eventually, a small branch library was opened in the learning centre.

This process did not happen overnight, but a few important lessons were learned:

- You cannot 'parachute in' to a community; the initiative needs to be 'owned' by the community.
- The curriculum needs to be flexible and negotiated to meet community needs, and the prior learning and experience of learners must be recognized.
- Child care, refreshments, technology and library resources need to underpin the initiative.
- It is more cost effective and sustainable to take one tutor to the classes than to take many learners to the tutor.

During the COVID-19 pandemic, health education classes and emergency food parcels to replace school meals were provided by the centre, making it an important focal point in the community in a time of crisis.

3. Facilitating learning for and in the workplace. Providing appropriate learning opportunities for all members of the workforce as well as unemployed youth and adults is of particular importance for any learning city. Due to globalization, technological progress and the growth of knowledge-based economies, most adults need to update their knowledge and skills regularly. Private and public organizations must embrace a culture of learning to respond to specific demands from different populations looking to improve their employability. Flexible learning pathways may support people's transitions between education and employment in cities.

When defining policy goals and interventions to facilitate learning for and in the workplace, it is advisable for cities to work in close collaboration with local employers and partners. The practices of some member

THE CITY BETA STORY

Box 4.8.

City Beta had the prospect of a major redundancy, with the type of manual skills required by heavy industry not being needed elsewhere in the region. This posed a huge challenge for the city, as the mainly male and middle-aged workforce needed a lot of support to change careers. The first stage was for the C3LP to provide adult guidance for these workers, so that they were well informed about future job opportunities and the new skills that would be needed. A shortage of tradespeople was reported in the city and a skills analysis revealed that many of the redundant workers had informally developed skills related to trades, such as plastering, carpentry and electrics, and general building work. A programme of training combined with the RVA of these skills was offered by the Further Education College and a 'Fast Track to the Trades' initiative was developed.

Understanding that no similar jobs to those lost were available, many of the redundant workers accepted the training opportunities and the immediate pressure on trades supply was lessened. There was, however, a gender imbalance in the trades, so this initiative was combined with a strategic increase in the number of apprenticeships funded by the Further Education College combined with a drive to engage girls in taking up these apprenticeships.

A major City Beta employer was having difficulties in recruiting software engineers and considering relocation to another city where the skills would be available. The employer approached the C3LP for advice; the university and some CLCs agreed to

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provide an intensive training programme, including RVA, for adults who wished to change careers to become software engineers. The training programmes were so successful that they were advertised across the city as evening classes as well as intensive courses over a few months for unemployed graduates and highly skilled refugees. The programmes allowed for flexible learning using credit accumulation and transfer (CAT), which meant that women in particular could take time out for family reasons and then return to learning.

Soon, a pool of highly skilled software engineers was available, and the employer was able to fulfil their requirements. The availability of a surplus of these skilled workers attracted other employers to relocate to the city, and a strong IT sector began to form in the city centre. Tech employers worked with the university to develop an annual Tech Festival, which attracted further tech businesses to the city.

cities of the UNESCO GNLC have shown different possible ways of collaborating with local employers to facilitate learning for the workplace. These include provisions related to education and training, such as offering training programmes for young people and adults who are out of education and training to gain or upgrade their skills; vocational training and skills development with local industries where job opportunities exist; and professional development opportunities for educators and trainers in order to embed entrepreneurial knowledge and skills in formal and non-formal learning (UIL, 2017a).

There are other innovative approaches to providing support and mentor-based provision for the community; for example, by facilitating ongoing support to help adults find and retain employment, developing schemes to align school-based career guidance with support for businesses that offer students on-the-job training, and providing workshops and

mentoring programmes to promote entrepreneurship among women and vulnerable groups such as ethnic minorities, migrants, lower socio-economic groups and those living in remote rural areas (ibid.).

Some member cities of the UNESCO GNLC also promote learning in the workplace by collaborating with local employers and partners. These initiatives can range from establishing flagship programmes to develop the leadership and entrepreneurial skills of business owners and managers, to partnering with local universities to formulate university-industry campuses that support entrepreneurship and the commercialization of research-led opportunities (ibid.)

THE CITY BETA STORY

Box 4.9.

The C3LP was concerned about the impact of mass redundancies. An analysis by the university revealed that the city was too dependent on a few large employers and the public sector for employment. The C3LP had seen how the tech sector had developed and decided to nurture other new enterprises that would each employ a small number of staff but would collectively be a major employment sector. Importantly, if the new enterprises were 'homegrown', it was anticipated that they would stay in the city and employ local people as they grew. It was also hoped that new opportunities for enterprise would help the city to retain talent, as highly skilled and creative young people tended to migrate away from City Beta.

The partnership agreed to develop entrepreneurial learning across all formal and non-formal education and training. The provision of support, training, finance and premises for new enterprises was mapped and gaps identified. The university and the Further Education College provided students to assist with developing enterprise skills from an early age in primary

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schools. The employers in the C3LP saw that the skills and attitudes they required were the same as those developed by entrepreneurial learning, so they were supportive and sponsored enterprise competitions.

The initiative was very successful: as well as the tech sector, a creative industries sector soon developed in the city centre, taking over vacant retail space and employing college and university graduates. Seeing the beneficial impact of these burgeoning sectors, the university developed enterprise support for health tech innovations, leading to a third nascent sector and attracting additional research funding.

LLL IN PRACTICE

Box 4.10. — Preparing young people for employment

The city leadership of Bristol, UK, has made a commitment to provide work experience placements and apprenticeship opportunities for every young person in Bristol who wants one. This commitment has been formalized with its inclusion in Bristol's wider strategic vision. A delivery partner has been commissioned to lead WORKS, a unique collaboration between employers, learning providers and local communities to develop a skilled local workforce. WORKS connects businesses and educators to develop better and more coordinated work experience opportunities, and to help young people find employment through a number of schemes, including apprenticeships.

Source: UIL, 2017

4. Facilitating and encouraging the use of digital learning technologies. ICT has opened up many new possibilities for education and learning, in particular by widening access to learning materials, enhancing the flexibility of time and place, and meeting learners' needs. Learning cities should therefore promote the use of these technologies for learning and self-empowerment.

The value of ICT to LLL is detailed in Chapter 3, and all the areas addressed there apply to learning cities. With urban environments typically home to high levels of internet connectivity and technological development, there are many opportunities to promote the use of ICT for formal, non-formal and informal learning in cities. Furthermore, learning cities have an obligation to counter any digital divide that may be prevalent at the local level, in terms of both infrastructure and schools. This means ensuring access to ICT for people living in deprived areas, as well as facilitating digital skills programmes for vulnerable groups.

The challenges associated with living in a digital age, where technology is progressing rapidly, widely affect older generations, who struggle the most to meet the increasing skill demands required of a digitalized society. An initiative in Shanghai, China, supports the ICT skills development of its older population by using a large-scale distance learning programme comprised of independent online courses and live online classrooms hosted by teachers across different districts. The course content was tailored to the learning needs of Shanghai's older citizens through an in-depth analysis (UIL, 2021).

An increasing number of cities are integrating ICT for LLL into their strategies for learning city development, such as Fatick in Senegal, which promotes digital literacy and offers virtual classes.

5. Enhancing quality and promoting excellence in learning. In developing learning cities, emphasis should be placed on enhancing quality in learning. This can be achieved with a paradigm shift from teaching to learning, and by moving from the mere acquisition of information to the development of creativity and learning skills. Quality also relates to

Box 4.11.

The COVID-19 pandemic highlighted unequal access to technology and the internet across City Beta, particularly in the disadvantaged communities on the east side of the city. In response, an emergency online meeting of C3LP members was called, and the gravity of the situation was outlined by the municipality's director of education. Many children did not have access to a device or the internet in their homes, so while all the schools were closed, they had no access to learning. The municipality had made immediate arrangements for the distribution of food parcels to children and families in need, but the situation regarding access to online learning was seemingly impossible to solve.

Immediately the C3LP partners offered solutions. Because the universities replace their computing equipment every three years, a store of redundant equipment could be distributed to families who lacked home computers. Schools managed the distribution and local employers, seeing the public relations opportunity, donated additional devices. Tech companies in the city offered to sponsor mobile dongles for the children due to sit exams that summer, providing internet access so that they could continue to study at home. CLCs provided their classes online for free.

Nevertheless, the problem of internet access remained for residents on the east side, where the internet service was unreliable. The C3LP team approached the internet provider that supplied the three largest companies in the city and asked for help. As a result, internet was provided for free to all the communities on the east side of the city and to individual families identified by the schools as being in need.

Furthermore, a website was created where all online lessons and materials could be hosted. C3LP members agreed to share

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the task of putting classes online so that each teacher took responsibility for the topics they were most enthusiastic about teaching; the whole secondary curriculum was rapidly made available in this way. Primary teachers held online sessions with children so they could provide home schooling and, at the same time, check that children were safe and well.

The lockdowns brought about by COVID-19 were particularly challenging for older adults enrolled in LLL programmes in both formal and non-formal learning institutions, as many of these learners lacked the skills or knowledge to 'go online'. To respond to this situation, many institutions set up a telephone helpline and coached each caller individually, whether they wanted to go online for shopping, meeting family or for learning. This service, combined with a strategic decision to make all classes free of charge during the pandemic, resulted in a vast increase in LLL class registrations.

raising awareness of shared values and promoting tolerance of difference. Employing appropriately trained administrators, teachers and educators is another key element in meeting the diverse learning needs of children, youth and adults.

Cities that mainstream LLL in their development have an active role to play in enhancing quality of learning. This is particularly the case for non-formal learning, as cities tend to have more influence in the local implementation of non-formal education than they do in the formal education sector. Though the situation varies depending on national and local contexts and governance structures, cities are likely to exercise jurisdiction in several important aspects of non-formal education, contributing to such areas as the management of local learning centres, local libraries' interventions for youth and adult literacy, facilitator training and curriculum design for basic education, and funding for local learning programmes. Policy goals

Box 4.12.

There are international measures that compare the educational outcomes of young people, and the City Beta Learning Partnership was concerned that the results for City Beta school students were not at all satisfactory. They therefore agreed to run a 'Quality in Education' project comprising several components, including buildings and infrastructure, teacher training, and the development of a 'twenty-first century' curriculum. The municipality contacted the national government with its ambitious plans and was allocated funding for the refurbishment of all schools. The municipality also had sufficient funds for a new secondary school, and it was agreed that this should be built on the east side of the city.

A local college specializing in TVET developed new programmes of teacher education, which focused on delivering the experiences, knowledge and skills that young people need for employment, LLL and active citizenship. The 'twenty-first century' curriculum was designed by teachers working together and is intended to guide learners who are ready to learn throughout their lives; be healthy, enterprising and creative individuals ready to play a full part in life; and work as global citizens of City Beta.

It was agreed that adult education had a large part to play in improving the quality of learning in City Beta. The data revealed that children whose parent or carer was participating in learning were less likely to become NEETs, perhaps because of the example set of valuing learning, attending classes and doing homework. It was further agreed by the C3LP team that adult education needed to respond to the rapidly changing world through a curriculum review. There was a need for more literacy and numeracy classes and a demand for language classes for refugees. Adult education teachers attended an Education for Sustainable Development (ESD) training event and agreed to embed ESD within all their classes, as well as providing some new environmental classes about 'Greening City Beta'.

and interventions aimed at enhancing quality and promoting excellence in learning should therefore consider the role of the city in non-formal education.

6. Fostering a culture of learning throughout life. Cities can foster a vibrant culture of learning throughout life by organizing and supporting public events that encourage and celebrate learning; by providing adequate information, guidance and support to all citizens; and by stimulating them to learn through diverse pathways. Cities should also recognize the important role of communication media, libraries, museums, religious settings, sports and cultural centres, community centres, parks and similar places as learning spaces. In the city of Tunis, Tunisia, for example, socio-cultural events are held during Ramadan and promoted through different media channels, including newspapers, radio, television and the internet. Cultural centres, such as cinemas, music venues and local theatres, are also involved (UIL, 2017).

Fostering a culture of learning throughout life involves all learning modalities: formal, non-formal and informal. As explained earlier in this handbook, informal learning cannot be planned or deliberately implemented, but it is possible to create conducive conditions. Public institutions in cities, such as museums, cultural centres and parks, can all be designed in ways that encourage informal learning by making it enjoyable and something to celebrate. This depends on engagement at the institutional level, where learning is celebrated through everyday activities. Celebratory events can also be organized in cities to foster a culture of learning, which is the case in many member cities of the UNESCO GNLC. For instance, the Irish learning city of Cork has been hosting annual LLL festivals each spring since 2004. The aim of these festivals is to promote and celebrate learning of all kinds across all age groups, abilities and interests, from pre-school to post retirement. In the past years, the festival has grown to be a week-long celebration, and now includes more than 600 events, all open to the public and free of charge. It has also helped bring HEIs into contact with marginalized groups. Over the years, the festival has become an important part of life for citizens in Cork, with a variety of learning experiences available across the city (UIL, 2015).

These six focus areas set out some of the options available to policy-makers once a problem has been identified. They are usually the result of a dialogue or an interaction between experts, policy-makers and stakeholders. In the case of the learning cities model, the above six suggestions are an established roadmap based on experience and the observation of multiple interventions in different regions of the world.

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Box 4.13.

A member of the C3LP was invited to Ireland to attend the Cork Learning Festival. What an amazing celebration of learning! Full of excitement, at the next meeting of the C3LP she proposed that City Beta should hold its own Learning Festival. Partners were keen but saw some challenges: the first being how to pay for it.

After a heated discussion in which every partner pleaded poverty, all the partners agreed to run their usual community events during the same week to start with and see how many events there would be. No special budget was designated, and partners contributed their usual learning resources. The college would run taster events across the city, the LLL service of the municipality would run tasters for all their usual classes, and a large employer would run ICT taster events for older people.

The second challenge: how would it be coordinated and publicized? None of the partners had run a citywide learning festival before. They therefore contacted the coordinators of City Beta's annual carnival, who provided invaluable advice about scheduling, attendance management, insurance and marketing. On their advice, the C3LP held an initial meeting and invited everyone who ran learning events in the city – including major employers; further education and training providers; universities, museums and art galleries; the prison

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education service; groups of artists, dancers, crafters, musicians and bekeepers; historians; entrepreneurs and business trainers – to attend. The meeting was a success – suddenly, over 400 events were planned to run during the festival week.

The third challenge was the weather, as it was unlikely that a week without rain could be planned. A local hospitality businesswoman was approached and asked to help. She offered to sponsor hired marquees for the whole city centre, which gave a colourful festival feel, provided cover when needed, and also provided excellent PR for her organization. The college art students designed and made advertising banners to hang from every lamppost and all the schools were provided with learning festival preparation packs. A musician composed a festival song which was learned by participating schools and musical groups.

Many forms of learning were celebrated, from pottery, felting, stained-glass design, belly dancing, ukulele and guitar groups to history walks, creative writing, museum explorations, employee training events, entrepreneurship coaching, language learning tasters and 'public engagement in science' events by university staff. It was agreed by partners that it was important for every form of learning that was offered to be included and celebrated.

As a result, over 10,000 people in City Beta participated by attending a taster event, resulting in many new registrations for learning opportunities, and ensuring that the learning festival was a huge success in developing a culture of LLL.

Box 4.14.

Having implemented the six interventions above, the C3LP held a meeting to consider its progress towards building a learning city. One of the C3LP members suggested that City Beta should consider making an application to join the UNESCO Global Network of Learning Cities. At first, the C3LP members felt daunted, as they thought that, although City Beta was making great progress, there were still many challenges, and they didn't feel that City Beta could claim to 'be a learning city' yet.

The university could see that membership of a prestigious internationally recognized partnership with a focus on learning would be beneficial for university partnerships and international student recruitment. The city official responsible for education, together with a senior member of the university staff, contacted the UNESCO Institute for Lifelong Learning, which encouraged City Beta to apply for membership and directed the city representatives to the Guiding Documents of the UNESCO GNLC.

These guiding documents explained that becoming a learning city is a process, not a state of being. The city official responsible for education gave a presentation at the next meeting of the C3LP, and it was agreed that the city would apply for membership of the UNESCO GNLC, to be coordinated by the local authority with support from the university. The first step was to map progress in the six interventions and then consider the three fundamental conditions for the implementation of LLL in City Beta.

Fundamental conditions for the implementation of LLL in learning cities

In addition to the six 'focus areas' that have been examined above, and which can be used as a framework for the design and implementation of policy innovations, the UNESCO concept of learning cities identifies three fundamental conditions for the implementation of the learning city model: (1) strong political will and commitment by the local government; (2) a participatory governance model involving all relevant stakeholders; and (3) the mobilization and use of resources.

1. Strong political will and commitment. To build a learning city and to ensure that its vision becomes a reality and is sustained over time takes strong political commitment. Local governments have the primary responsibility for committing political resources to realize a learning city vision. This involves demonstrating strong political leadership when developing and implementing well-grounded and participatory strategies for LLL, and consistently monitoring progress towards becoming a learning city. In many learning cities, local government representatives oversee the organization of projects linked to the learning city strategy, yet in the process, they cooperate closely with stakeholders from the private sector and civil society (UIL, 2017).

Ideally, the learning cities approach will not only benefit cities themselves but also promote LLL and sustainable development throughout the whole country. The spirit of learning cities can spread as a best practice from one city to another and can lead to a countrywide initiative. National and provincial governments can promote and steer development of learning cities in their country actively through national policy-making, research support and dedicated resource allocation to learning cities. However, it is clear that achieving the wider benefits of learning cities needs strong political commitment, not only at the local level but also by regional and national decision-makers.

Box 4.15.

City Beta's mayor and the municipality were fully committed to the City Beta learning city initiative; however, a change of political leadership could impact the C3LP's plans. A meeting of the C3LP was therefore called, where its members agreed that the best method of securing the learning city initiative through any such change of leadership would be by embedding it within the city's education and training policies. The municipality officers took this forward and secured a multiparty agreement that City Beta's learning city development should be enshrined in city policy documents as an ongoing, permanent plan; this decision also meant that an annual budget would now be allocated to take City Beta's learning city initiatives further.

In order to apply to the UNESCO GNLC, City Beta had to gain the support of the National Commission for UNESCO. Three cities could be proposed for membership by the National Commission from each country in any application cycle. Representatives from the National Commission were invited to attend the City Beta Learning Festival and met C3LP members to discuss the progress of the learning city.

Many cities in the country were keen to apply for GNLC membership that year, so City Beta was delighted to be proposed by the National Commission in recognition of its development so far.

2. Participatory and multi-level governance. To reiterate, building learning cities requires a multi-level governance approach founded on the strong political will of national, provincial and local governments. Based on the steadfast commitment of politicians and administrators, cities should enforce a participatory approach and include different voices

in public decision-making, particularly by engaging in a continuous and open dialogue with civil society. Many local governments have developed strategies to enhance citizens' participation in the decision-making and implementation processes, including participatory budgeting, neighbourhood committees, youth councils and e-governance solutions, among others (UN-Habitat, 2015).

THE CITY BETA STORY

Box 4.16.

The City Beta Learning Partnership already had a wide range of learning providers, private sector employers, NGOs, and interested formal and non-formal institutions involved in its development plans. An observer from the regional government was also invited to get involved. Thinking about multi-level governance revealed that the city had not included citizens in the governance of the learning city. The C3LP therefore decided to establish Learning Neighbourhoods, which would each have a representative on a Learning Neighbourhoods Panel. Representatives from youth groups, ethnic minorities, migrants and women were encouraged to join, so that a cross-section of citizens became involved. The Learning Neighbourhoods Panel would have two representatives on the C3LP, one from the east side neighbourhoods and one from the west side.

An annual award of funding for the development of a new programme of learning would be made to one Learning Neighbourhood from each side; it was agreed by the C3LP that the programmes of learning should have a theme of 'strengthening citizenship' and focus on human rights, peace education, ESD, education for international understanding or a topic related to any of these.

Relations between stakeholders can be vertical (between different levels of government, referred to as multi-level governance), horizontal (within the same level, for example between ministries or between local governments, referred to as cross-sectoral governance) or both. Partnerships with non-state actors, such as civil society organizations and the private sector, are also necessary for the achievement of common goals. Furthermore, urban governance should be gender-responsive and facilitate the inclusion and participation of youth, minorities and a cross-section of citizens.

LLL IN PRACTICE

Box 4.17. — Participatory LLL governance in cities

The City of Melton in Victoria, Australia, established the Community Learning Board (CLB): a governance mechanism that gives communities and organizations a direct influence on the design and supervision of LLL strategies addressing social and economic issues. Members of the CLB are appointed for four years or for the duration of a Community Learning Plan, which is developed by the CLB to implement Melton's learning city strategy. The CLB is usually chaired by the mayor and includes leaders from a variety of sectors: business and industry; NGOs and not-for-profit organizations (NPOs); employment services; state and independent primary and secondary schools; universities and vocational education providers; adult education; mature-age learning; early learning; the health sector; disability education providers; community representatives; and the Victorian Department of Education and Early Childhood Development. A Melton city councillor, the council's chief executive officer, and key council managers and personnel relevant to the implementation of Community Learning Plan goals are also members.

Source: UIL, 2015

3. Mobilization and utilization of resources. To implement LLL in learning cities, resource mobilization and utilization is key. Cities and communities that invest in LLL for all have seen significant improvements in terms of public health, economic growth, reduced criminality and increased democratic participation. Encouraging greater financial investment in LLL by government, civil society, private sector organizations and individuals is a central pillar to securing the means to build and sustain learning cities. This can be achieved through multi-stakeholder funding partnerships, cost-sharing mechanisms, match funding and sponsorships, and by linking to philanthropic or private-sector partners.

An example of cost-sharing mechanisms is found in Villa María, Argentina, where a multi-stakeholder partnership between institutes in the public and private sector has been established, each with their own budgets allocated to contributing towards the learning city project. To mediate fairness and representation between the multiple financial stakeholders in the project, a Learning City Council was created and later ratified by the municipal council. The Learning City Council is responsible for forming committees, planning actions encouraging LLL in the city, and liaising with local forums such as activity and event groups and community liaison committees. Villa María's cost-sharing approach to funding enabled a substantial increase in human resources, learning opportunities and representation of a wider range of sectors, including the education sector, production sector and community organizations (UIL, 2017).

The possibilities for mobilization and utilization of resources go far beyond cost-sharing mechanisms to include non-financial means, such as using all stakeholders' resources as learning sites. These include cultural venues, libraries, restaurants and shopping centres, among others. This can bring learning closer to the people and ease access for everyone. Another way to use non-monetary resources is to invite citizens to contribute their talents, skills, knowledge and experience on a voluntary basis, and to encourage the exchange of ideas, experiences and best practice between organizations in different cities. Contagem, Brazil, for example, has introduced a 'community speaker' project, which encourages community leaders to work together with staff from different city departments and private-sector

bodies to promote the concept of LLL. To support the dynamic use of resources, universities share the cost of the community speaker project and provide rooms for conferences, meetings and workshops for public servants who are members of management committees (ibid.).

THE CITY BETA STORY

Box 4.18.

The C3LP identified that the development of skills in the city needed to change in order to enable citizens to access new employment opportunities in the future. They undertook a detailed skills-needs analysis of all current and nascent employment sectors in the city, asking for their views on future skills needs. Alongside this, the university, together with local TVET institutions, undertook horizon scanning to map potential areas of investment in the city and region in response to the development of renewable energies, zero-carbon and energy-efficient building technologies, the circular economy, blockchain, AI and health technology innovation, all sectors either developing or nascent in the region and developing areas of expertise within the university and Further Education College.

The C3LP made a large funding bid to the national government for the intensive development of these new skills areas. The national government was impressed by the entrepreneurial leadership of the C3LP and agreed to fund the City Beta Skills Initiative as part of its regional development plan. The university and college established centres of excellence and free training in the skills needed to underpin each new industrial development.

The COVID-19 pandemic revealed a need for health education and a healthier environment in the city. This was not just about the ways in which to prevent transmission, but also about how to improve healthy lifestyles for all citizens and reduce underlying health vulnerability.

A Learning Neighbourhoods Group was concerned about air quality and developed a cross-city air-quality monitoring project, which presented its findings to the C3LP. As a result, the university initiated a research project to reduce emissions of particulates by the major manufacturing plant on the east side of the city, working with international partners identified through the UNESCO GNLC who were tackling the same problem. The municipality created a park and ride scheme to reduce traffic through the east side into the city, introduced car-free zones in the city centre, and increased the provision of cycle lanes and safe cycle parks.

A project to 'green' City Beta was initiated by an environmental NGO and adopted with enthusiasm by the municipality. Landlords were given grants to create green roofs and walls on their city centre buildings, and new green spaces were created by changing road designs and using planted areas to reduce water run-off and noise pollution. Public green spaces and parks were left to grow, creating areas of wildflowers and havens for wildlife. University staff started beekeeping in the university grounds and students built eco-huts for use in environmental education. Learning Neighbourhoods started community gardens, with enthusiastic uptake of vegetable and kitchen gardening.

Adult education empowers learners and develops their confidence to be assertive and work collaboratively to address local needs. The adult education tutors had embedded ESD into their curriculum, which raised awareness among learners in the east side about the risks associated with climate change. They formed a study circle (see Chapter 3) and became concerned about the potential problems of flooding in their community and the high levels of pollution in the river. The study circle expanded and eventually formed the 'East Side Learning Neighbourhood Flood Prevention Group', which contacted the

national body for monitoring pollution and the municipality's environmental officers.

A lively meeting resulted in the promise of an action plan by the monitoring body to tackle the problem from upstream farming pollution. The municipality also responded to the suggestions of the group by working with the main employer on the east side of the estuary to create an artificial floodplain. A large area of land no longer needed by the employer due to the contraction of the industry was returned to wetland with overflow into the sea, reducing the risk of flooding on the east side. Community volunteers developed hides for watching birdlife as the wetlands became populated by wildfowl.

These responses to sustainability issues had a direct relation to adult learning and demonstrate that learning can help to solve major problems for our communities.

Building a monitoring and evaluation system

Designing an M&E system for policies aiming to achieve multiple goals, as in the case of learning cities, is a complex task. While some monitoring models have been developed for learning cities, this is one of the areas in which more comparative research on good practices is still needed.

Since collected information will inform decision-makers for planning and accountability purposes, it is important to represent key processes and goals with reliable indicators and similar measurements. Additionally, M&E systems must correspond to considerations and goals defined in previous stages of the policy design process. *Figure 4.1* is a list of key features and measurements developed by UIL (2015b) as an example of an M&E indicators system for a learning city. Although it includes only basic measurements on potential outputs, it identifies how broad goals are disaggregated into specific actions and how these actions are translated into specific goals to be achieved.

Figure 4.1. Monitoring and evaluation indicators

1.1 Empowering individuals and promoting social cohesion	1.1.1 Ensuring that every citizen has the opportunity to become literate and obtain basic skills	**Adult literacy rate:** Total number of literate persons aged 15 and above, expressed as a percentage of the total population of that age group	Official data provided by city authorities	Male Female Total	% % %
	1.1.2 Encouraging and enabling individuals to actively participate in the public life of their city	**Participation rate in election:** Participation rate of population of eligible age in the most recent major election in the city	Official data provided by city authorities		% (Year)
		Participation in volunteering and community ativities: Percentage of citizens involved in unpaid volunteering and community activities in the 12 months preceding the survey	Survey results		%
	1.1.3 Guaranteeing gender equality	**Gender equality in politics:** Percentage of seats held by women in city council/congress	Official data provided by city authorities		%
		Gender equality in business management: Percentage of seats held by women in boards of top ten enterprises	Survey results		%
	1.14 Creating a safe, harmonious and inclusive community	**Crime level:** Number of recorded crimes per 100,000 inhabitants	Official data provided by city authorities		
		Social mobility: Percentage of citizens with disadvantaged social background who believe that their children will enjoy higher social status than themselves	Survey results		%

Source: UIL, 2015b

Box 4.19. — Indicators and monitoring systems for LLL in cities

UNESCO GNLC member cities have attempted to develop their own indicators and monitoring systems, as demonstrated by the learning city of Goyang (Republic of Korea), where a central learning city vision to facilitate and promote sustainable and inclusive learning, community participation and increased LLL opportunities was recently established. These objectives lay the foundation for the development of Goyang as a lifelong learning city. In reference to the UNESCO GNLC's Key Features of Learning Cities, Goyang adopts several domains, which focus on developing fundamental infrastructures, information, finance, organization and policy infrastructures. The indicators to measure these domains were developed using critically analysed rounds of public surveys by experts until a consensus of appropriate, reliable and relevant indicators were agreed upon. The data analysis of these domains is continuously monitored through qualitative evaluation systems, with the objective of ensuring regular indicator refinement and review in line with the ever-changing times and regional characteristics affecting Goyang.

In 2000, Beijing (People's Republic of China) initiated its learning city development plan; since then, it has developed a comprehensive monitoring indicator system to support its goals. Examples of the quantitative indicators include measuring GDP per capita, the number of community institutions and facilities for older people, and the annual participation rate of urban and rural residents in community education. Further to this, examples of qualitative indicators include measuring publicity within the learning districts, the construction of learning districts, and the promotion of regional development strategies.

In 2020, the indicator data collected from the monitoring process were used to develop a report that summarized Beijing's experiences

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and challenges, and which proposed suggestions for future improvements. This report was presented to the Beijing Municipal Commission of Education as a means of informing policy-making and to improve the city's efforts.

Beijing's education departments have since worked to establish an information platform where indicator data collection and reporting can be shared effectively between district educational administrative departments and the Beijing Municipal Commission of Education. Additionally, city-based improvements in learning city planning and management have been seen across several of Beijing's districts through incentives that encourage community participation and develop the infrastructure of the city.

Sources: Goyang Research Institute, 2020; Beijing Academy of Educational Sciences, 2021

Beyond the availability of information, it is important to create conditions to promote the instrumental use of monitoring and evaluation – that is, to guarantee that any information can be used to support decisions. Policy-makers should consider how the information collected might be used by advocates to encourage widespread understanding and ownership of LLL as a philosophy and an approach. LLL policy-makers need to take a critical stance with regard to LLL initiatives to identify gaps or issues requiring attention. These could include the need for safe learning environments for everyone, the digital divide (which can lead to the exclusion of some learners), the learning needs of people with disabilities, gender-sensitive teaching and learning modalities, and awareness of the difference between urban and rural access to learning. Leaders within educational institutions should work to produce an institutional strategy for LLL as a document, succeeded by a collective effort to ensure that strategy's implementation.

In addition, policy-makers must consider an increase in research activities focused on LLL by collaborating, cutting across different disciplines, and reflecting on how the interconnectedness of learning transcends traditional categories and boundaries. By supporting and disseminating research, HEIs can reinforce LLL not only locally, within the institution itself, but also nationally and internationally.

THE CITY BETA STORY

Box 4.20.

One of the foundations for building a learning city is to develop monitoring and evaluation of progress. The City Beta Learning Partnership held a forum with evaluation experts from the university, college and municipality education service; the forum members agreed that an evaluation plan should be developed which measured progress against the SDGs in the city, including progress in promoting LLL. A document from the UNESCO GNLC, Learning Cities and the SDGs:

A Guide to Action, provided invaluable guidance (see also Chapter 1). Taking this broad approach meant that, as partners of the C3LP, all institutions in the city would contribute to City Beta's LLL goals, not just the education and training providers. The data collected could also be used to inform the government of the country about local progress towards achieving the SDGs.

The more the members discussed the SDGs, the more they realized that their work in building a learning city had, in fact, been helping City Beta to become more sustainable. The C3LP agreed that this interrelationship would form the basis of an M&E system for learning city development, inspired by the model established by the city of Goyang, Republic of Korea (see Box 4.19).

There are still many challenges to be faced in City Beta, including the likelihood of an increase in the number of

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migrants and refugees coming to live in the city. Their reasons for relocating to City Beta are manifold, and include conflicts in neighbouring countries, climate emergencies and climate change pressures, and economic migration. As noted in Box 4.2, the citizens of City Beta have a great reputation for being welcoming to those in need; it was therefore agreed by the C3LP that City Beta would not just react but proactively prepare for this population increase.

Looking at other members of the UNESCO GNLC for inspiration, the C3LP partners saw a similar response to refugees in Larissa, Greece, as well as in Swansea, UK. These two case studies inspired City Beta to welcome new citizens by planning for new homes, language support, school places and training opportunities for adults. The municipality therefore identified vacant homes that could be renovated and made useful, while the Further Education College and the City Beta Learning Partnership planned additional programmes for language learning. Finally, the health authority ensured that counselling support would be available in case refugees had suffered traumatic events.

The C3LP realized that its experience in developing systems for the RVA of non-formal and informal learning outcomes would be useful, as many refugees would have lost their documentation during their journey. The university offered to run a qualifications recognition service, so that highly qualified refugees with qualifications gained abroad could quickly gain recognition and employment. Most importantly, an appeal through the Learning Neighbourhoods met with an immediate warm response from citizens and the offer of clothing and household items.

The rural areas around City Beta lack facilities for cultural pursuits and there is rural poverty in many districts, so extending the learning city to encompass the region is part of the development plan. An approach has been taken by the UNESCO GNLC member city of Trieste, Italy.

Transport continues to be a problem in City Beta, however, and the infrastructure for a transition to electric vehicles is not yet available. One idea is to create aerial routes over the city for pedestrians and cyclists, but feasibility studies need to be undertaken, as winds have been very high in recent climate events. The learning city of Medellín, Colombia, has created a train network that crosses the city in four directions and then reaches up into the mountainous rural areas using funicular railways and cable cars, ensuring that all communities can reach the city centre at low cost, thereby accessing jobs and education. City Beta does not have steep hills but does have communities on the east side who are disconnected due to a lack of affordable public transport. An electric tram or similar may be the answer, but the main challenge is how to reduce the cost for passengers.

Renewable energy is seen as another opportunity for investment, and the city is considering how to develop this with as little impact on citizens' daily lives as possible. Research by the university has become a key part of City Beta's learning city initiative and helps the C3LP to make informed decisions and feasible plans.

Measuring progress against the SDGs highlighted the huge impact that City Beta's learning city initiative has made in addressing the imbalance between the east and west sides of the city, and in achieving SDG 4. Seeing progress being made is a great motivator for further endeavours, so the municipality decided to hold a learning city celebration for all citizens, boosting morale after a challenging couple of years. Moreover, City Beta was informed that it had been accepted into the UNESCO GNLC. There was great excitement in the C3LP, and the news was announced at the start of the second City Beta Learning Festival, so that celebrations could be citywide and community-deep.

Because of continued restrictions due to COVID-19, the celebration was outdoors; yet it was accessible for all and free to enter. The city decided to provide a music and lights display, using the sea as the background and ensuring that all citizens could see it from their homes. This was a popular decision and may be repeated in future years, as City Beta continues to make progress in developing into a learning city.

Learning by doing: Continuously improving as a learning city

The LLL policy process means engaging in continuous policy improvement, i.e. learning lessons from policy design and implementation and taking account of how public problems and contextual factors are constantly evolving. In the case of the learning city model, this means retaining the idea that 'learning city status' is not achieved through a prescribed list of interventions. As explained in the network's guiding documents, building a learning city 'is a continuous process; there is no magic line over which a city will pass in order to become known as a learning city' (UIL, 2015b, p. 9). Fundamentally, for stakeholders involved in the implementation of the learning city model, recognizing this 'continuous process' underpins policy refinement. Finally, since the policy process is dynamic and non-linear, steps to 'refine' a policy do not mean that the cycle is complete: revisiting previous stages is always advisable.

This chapter began by exploring LLL in urban areas before introducing a teaching case study, City Beta, a succinct exercise in applying the handbook's guidance on national LLL policy-making and the design of LLL implementation strategies. The City Beta case study demonstrated the LLL policy-making process in concrete terms and revealed how considerations relevant to the design of LLL implementation strategies can be applied to a specific LLL policy. A similar approach can be used for other LLL policies – regardless of the targeted level of implementation – to make the guidance provided in this handbook relevant to any national context.

Essential reading

UIL (UNESCO Institute for Lifelong Learning). 2015. *Guidelines for building learning cities: UNESCO Global Network of Learning Cities*. [PDF] Hamburg, UIL. Available at: http://unesdoc.unesco.org/images/0023/002349/234987e.pdf [Accessed 20 April 2020].

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Further reading

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CONCLUSION

CONCLUSION

This handbook on LLL is an attempt to capture the holistic, all-encompassing vision of LLL and recast it as practical guidance for education stakeholders. Rather than providing an exhaustive account of LLL in all its forms, the purpose of this publication is to articulate what LLL is so that it may be understood, recognized, promoted and applied in concrete terms, through national policy-making and the development of national implementation strategies.

Chapter 1 of this handbook defined LLL, presenting UNESCO's understanding of LLL and its key dimensions. The case was then made for the promotion of LLL, equipping the reader with a series of evidence-based arguments on how LLL can ameliorate some of the large-scale and often drastic issues facing the world. Chapter 1 thus provided the starting point for a policy-maker, government official, institutional leader, facilitator or researcher to advance LLL as a policy response to immediate challenges and long-term deficiencies in learning systems.

For LLL to move from being a concept or an ideal to a catalyst for transformations in people's learning opportunities and experiences, it requires development at the policy level. Chapter 2 therefore defined LLL policy and the policy-making process, as well as presenting several factors for the creation of effective LLL policy. These factors show that, fundamentally, LLL policy should be aligned with national and local contexts, feature a comprehensive vision for LLL, establish governance arrangements, be financially viable, use evidence as a basis for monitoring and evaluation, and involve consultations for participatory LLL policy-making.

Chapter 3 focused on the implementation of LLL, addressing diverse forms of implementation through the prism of the national LLL implementation strategy. This chapter demonstrated how implementation strategies can accommodate and strengthen LLL opportunities in formal education as well as through non-formal and informal learning. To create links between learning modalities, guidance was provided on

flexible learning pathways and how to create them using surrounding policies such as national qualifications frameworks and measures for the recognition, validation and accreditation of learning outcomes. Subsequently, the chapter addressed the value of ICT for LLL and the important role of multi-level governance in LLL implementation.

Chapter 4 then shifted to the local level, starting with an overview of LLL in urban areas and placing the focus on the UNESCO GNLC learning city model. The City Beta teaching case study demonstrated the LLL policy-making process in concrete terms and revealed how considerations relevant to the design of LLL implementation strategies can be applied to a specific LLL policy.

Taking a global perspective and building upon experiences, the ultimate goal of this handbook is to provide the reader with comprehensive, accessible guidance on how to make LLL a reality for all.

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This handbook provides education stakeholders with practical guidance on lifelong learning. With an overview of key concepts, policy issues, technical knowledge and practical approaches, it demonstrates how lifelong learning can be strengthened in policy-making and implemented at national, regional, local and institutional levels. The handbook supports those experts and professionals in the field of education who wish to develop their understanding of lifelong learning, and offers tips, information and examples targeted at learners, facilitators, institutional leaders, policy-makers and legislators. More broadly, it illustrates how lifelong learning can address complex political, social, economic and environmental issues affecting people around the world.

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