



Presented to the UNESCO World Higher Education Conference (WHEC2022)

by the UNESCO Institute for Lifelong Learning

The UN Sustainable Development Goal (SDG) 4 enjoins countries to 'promote lifelong learning opportunities for all' (UN DESA, 2022). It thereby establishes lifelong learning (LLL) as central to a sustainable future. Transforming higher education institutions (HEIs) into lifelong learning institutions is key to realizing this goal. HEIs are in a unique position to promote sustainable societies through their expertise in knowledge production, skills development and academic exchange. By expanding access to new populations of students, HEIs can promote LLL throughout the wider society. This policy brief provides insights on principal areas of action for policymakers and other key stakeholders. It highlights the importance of enabling policy environments at the national and institutional level, looks at institutional structures and mechanisms, and evaluates different ways of widening access and increasing participation to foster the transformation of HEIs into lifelong learning institutions.



Content

ntroductionntroduction	3
Action area 1: Develop policy environments that support the promotion of lifelong learning in higheducation	
Recommendation 1.1: Governments should create comprehensive national policies and frameworks to establish LLL as a core mission of HEIs.	4
Recommendation 1.2: HEIs should develop institution-wide approaches to LLL that adhere to all three missions of higher education	5
Action area 2: Establish institutional structures and mechanisms that support LLL	5
Recommendation 2.1: Extend funding schemes to include LLL opportunities in HEIs	5
Recommendation 2.2: Implement quality assurance procedures to ensure greater recognition an effectiveness of LLL	
Action area 3: Widen access and participation to society at large	6
Recommendation 3.1: Diversify curricula and 'decolonise' knowledge to make learning relevant to non-traditional students.	
Recommendation 3.2: Adapt learning formats to address diverse learning needs and include degree- and non-degree programmes as well as different delivery modalities	6
Recommendation 3.3: Expand flexible learning pathways, including the RVA of prior learning, across HEIs	7
Recommendation 3.4: Develop further the potential and inclusivity of technology-enhanced learning to benefit non-traditional learners.	7
Recommendation 4.4: HEIs should expand their engagement with local communities.	8
Concluding remarks	8
References	10

Introduction

Sustainable Development Goal (SDG) 4 of the 2030 Agenda for Sustainable Development represents a considerable advancement in establishing lifelong learning (LLL) as an overarching vision, conceptual framework and organizing principle across education systems. LLL is rooted in the integration of learning and living, and comprises learning activities for people of all ages, in all lifewide contexts and through a variety of modalities that, together, meet a range of learning needs and demands. The call to 'ensure inclusive and equitable quality education and promote LLL opportunities for all' (UN, 2022) is based on the premise that individuals need to continuously update and expand their skills and competences throughout their lives in formal, non-formal and informal settings.

Higher education institutions (HEIs) – including universities, colleges, polytechnics and technical and vocational education and training (TVET) institutions – are essential actors in the promotion of LLL because of their unique capacities to develop people's skills and foster knowledge, as well as their potential to mobilise educational resources and provide learning opportunities for all (Osborne, Rimmer and Houston, 2015; Orazbayeva, 2017; Šmídová et al., 2017). This implies a fundamental shift in the concept of higher education, from a stage in learning directed at young adults advancing from secondary education to one that addresses the needs of diverse learners who are entering or re-entering a learning environment at different ages and stages of their personal and professional lives (Slowey and Schuetze, 2012; Cendon, 2018).

In recent decades, the dominant trend in the higher education sector has been its widespread massification, with curricula becoming increasingly market driven and designed to serve a larger share of the population (Altbach, Reisberg and Rumbley, 2009). Between 2000 and 2018, the global gross enrolment rate in higher education rose from 19 per cent to 38 per cent (UIS, 2020). Nevertheless, while an increasing share of the population is participating in higher education, it is primarily traditional students, i.e., post-secondary students under 25 years old who wish to study full-time and who do not have major additional work or family responsibilities (Marginson, 2016).

As higher education has expanded, it has also become more competitive. Students today compete for admission while institutions compete for status, rank and funding against a backdrop of an increasingly involved private sector (Altbach, Reisberg and Rumbley, 2009). Moreover, as new university models emerge, such as mass online tertiary education, the differentiation of higher education - different social groups experiencing contrasting educational experiences in terms of recognition and quality - has also intensified. These dynamics demonstrate that, while higher education has become more widely accessible, major inequalities persist regarding gender, age, socio-economic background and ethnicity.

Developments in the higher education sector are deeply impacted and shaped by the social and economic trends of the twenty-first century, such as technological progress, climate change, demographic shifts, globalisation and the transforming world of work (Chiţiba, 2012). Responding to these challenges and paving the way for a more sustainable future requires innovative and holistic policy-making that transcends disciplines and sectors. For higher education, this means expanding curricula so that learners' skills and knowledge prepares them for a rapidly changing world.

Often referred to as a 'third mission' in addition to the standard objectives of teaching and research, HEIs' contribution to the economic, social and cultural life of the communities they serve is increasingly valued (Fongwa, Marais and Atkinson, 2014). Institutions around the world are responding to this third mandate by expanding access to learning and promoting the concept of LLL as a core principle for sustainable development. Embedding LLL in higher education and vice versa naturally has implications for national policies, institutional commitments in the form of strategies and mission statements, funding and organizational structures, curricula and pedagogies, flexible learning pathways and community engagement.

While the higher education sector has significant assets that lend themselves to the promotion of LLL, this potential is far from being realised. This is partly due to a lack of awareness within HEIs about the role LLL can play in equipping them to better address current and future challenges. Many HEIs continue to prioritise academic excellence in teaching and research, remaining in the so called 'ivory tower', with less attention being paid to widening access and providing LLL opportunities for all (Brennan and Magnes, 2019). In addition, there is no unified and standardised approach to LLL promotion across institutions which leads to a diversity in LLL offerings that obscures the progress made in this area (De Viron and Davies, 2015).

Since LLL can be offered by a variety of formal and non-formal education institutions in a wide range of learning modalities and purposes, the specific role of universities often remains unclear (Milic, 2013; Ratana-Ubol and Richards, 2016; Johannesen, Øyan and Magnus, 2018). Fostering a coherent and widely accepted understanding of LLL within higher education, aligned with the vision of the SDGs, requires fundamental policy change. Ultimately, it implies a substantial transformation of HEIs into LLL institutions. It also calls for HEIs taking on a more prominent role within learning environments and ecosystems¹, spanning across disciplines and sectors that include formal, nonformal and informal learning and are open to people of all ages and backgrounds. The following three main action areas and associated policy recommendations highlight some of the priorities HEIs should focus on if they are to transform into LLL institutions.

Action area 1: Develop policy environments that support the promotion of lifelong learning in higher education.

Turning HEIs into LLL institutions requires favourable policy environments that support and incentivise the adoption of LLL. National and institutional policies, strategies and frameworks are instrumental for promoting LLL in HEIs. Comprehensive higher education policies recognise the priorities of HEIs while firmly establishing LLL as a mission. Creating such policy environments depends on the political will of various stakeholders and the national ministries in charge of higher education; the broader political, economic and administrative environment; and the deployment of resources. If not well designed, these policies can limit institutional autonomy and act as a barrier because they do not allow for individual adaptation (Foster and McLendon, 2012).

Recommendation 1.1: Governments should create comprehensive national policies and frameworks to establish LLL as a core mission of HEIs.

Policies at the national level show political will and support for implementing LLL in higher education. This is also in the interest of national governments, which need to respond to the fundamental transformations in demography (ageing), labour markets (digitalisation) and societies (emergence of learning and knowledge societies) that require new skill sets in the decades to come. In order to respond to the skill demands for the futures of work, continuing education and LLL should be considered a strategic priority and core mission of (publicly funded) HEIs, elevating them to a mandatory field of action for higher education to ensure the continuous participation of individuals in social and economic life. This central mission is reflected in regional frameworks such as the European Universities' Charter on Lifelong Learning (EUA, 2008), which calls for the introduction of LLL policies for HEIs at the national level. In effect, national policy frameworks encourage individual HEIs to develop institutional strategies based on their specific profile and in line with national regulations. Through their impact on institutional strategies, funding and quality assurance, properly formulated policies and legislation at the national level increase support for the development of LLL opportunities in HEIs (Martin and Godonoga, 2020).

4

¹ The Organisation for Economic Co-operation and Development (OECD) defines a 'learning ecosystem' as a system that comprises diverse providers, resources and learners operating as an organic unit in interaction with its environment and with other ecosystems. A 'learning environment', meanwhile, represents organised learning for given groups of learners around a single pedagogical core and shared learning leadership (Source: OECD, 2017, p. 9).

Recommendation 1.2: HEIs should develop institution-wide approaches to LLL that adhere to all three missions of higher education.

At the institutional level, LLL policies should adhere to all three missions of higher education — namely, teaching, research and wider societal engagement — to facilitate whole-institution approaches to LLL that are supported by the strong commitment of HEI leadership. HEIs typically offer a variety of activities that could already be classified as LLL. Any institutional strategy must therefore be overarching enough to encompass this diversity and yet define sound institutional principles to rationalise LLL throughout the institution. One approach to this might be to adopt a strategy that, for instance, uses the revenues from fee-based programmes, like an MBA, to fund LLL programmes for less-privileged groups or free lecture series that are open to the public.

Striking the right balance between flexibility and rules-based professionalisation of LLL in HEIs requires engaging all stakeholders and respecting the interests of professors, learners, academic leadership and the staff responsible for LLL opportunities. Implementing LLL programmes depends on committed individuals, yet academic staff are occupied with their own research, students and degree programmes. Moreover, the incentive structures of the academic world – which primarily reward high-impact publications – do not encourage the kind of engagement needed to carry out an LLL programme for diverse sets of learners. Committed institutions can counteract this by comprehensively implementing LLL throughout their different departments.

Action area 2: Establish institutional structures and mechanisms that support LLL.

The implementation of LLL in HEIs requires not only an enabling environment but also policy operationalisation, which manifests itself in structures and mechanisms. The latter make the implementation process possible because they offer concrete opportunities for learning provision within individual institutions. Part of this may include the creation of dedicated LLL units that take the operational lead for implementation. LLL units allow for institution-wide implementation and are thus able to establish shared understanding, engagement by different stakeholders and the development of specific expertise.

Recommendation 2.1: Extend funding schemes to include LLL opportunities in HEIs.

Adequate funding is essential for ensuring comprehensive and properly implemented LLL at the institutional level. HEIs, whether public or private, typically rely on a variety – and often multiple – funding resources to pay for their activities. These resources include self-funding by the HEIs themselves, dedicated public funding, tuition fees, and other income-generating activities or donations. Institutional funding is often tied to accredited programmes with measurable outputs (i.e., degrees). Rethinking funding to reflect the growing importance of more flexible forms of LLL provision, including non-accredited courses and the short-term courses characteristic of LLL, would promote the professionalisation of LLL in higher education (Jacob and Gokbel, 2018; Chapman; Deardon and Doan, 2020).

At the individual level, non-traditional students mostly rely on personal resources. Public or institutional financial support in the form of scholarships or means-tested grants – that is, financial support based on whether the individual has the resources to participate in education without financial aid – are not the norm for LLL. While many adult learners have a job and thus financial resources, the lack of financial support mechanisms can be a barrier to participation in learning for those with fixed expenses or family commitments.

Recommendation 2.2: Implement quality assurance procedures to ensure greater recognition and effectiveness of LLL

Since funding is often tied to measurable outputs, a mechanism to define and monitor these outputs, including for non-formal LLL, is essential. Proper monitoring and evaluation tools are also instrumental for ensuring and prioritising high-quality, effective and relevant learning opportunities

(De Viron and Davies, 2015). LLL encompasses a variety of activities, some which differ greatly from traditional degree-based learning. These increasingly flexible models of formal education systems can blur the boundaries between formal, non-formal and informal learning. To ensure that LLL programmes are meaningful and respond to the learning needs of a variety of learners, including disadvantaged groups, clear principles and quality assurance criteria must be defined. Their enforcement can include internal quality assurance procedures and organizational structures as well as external quality assurance by recognised agencies (Bejan at al., 2015). Examples include the enhancement of academic programmes; monitoring the completion rate of study programmes, academic staff performance and adult learner assessments; and the evaluation of adult learner structures. Overall, well-established quality assurance procedures contribute to the professionalisation of LLL, thus representing a useful tool to promote the expansion of academic and financial resources for LLL in HEIs.

Action area 3: Widen access and participation to society at large.

HEIs are part of formal education systems and thus play a particular function in society. This implies a responsibility, reflected in HEIs 'third mission', to engage with the wider public and respond to societal needs. LLL has vast potential to realise this goal through expanding access and increasing participation in higher education. At the same time, it challenges traditional approaches of higher education because LLL opportunities imply an increasing diversity of learners and learning needs that HEIs must adapt to.

Recommendation 3.1: Diversify curricula and 'decolonise' knowledge to make learning relevant to non-traditional students.

To make educational opportunities and content relevant for non-traditional students in higher education, HEIs should diversify curricula and decolonise knowledge (Formosa, 2014). This requires challenging Western/European epistemologies in favour of global epistemologies, and opening knowledge systems to include knowledges from Indigenous peoples, minorities, and cultures from the Global South (Chan et al., 2020).

Integrating a variety of learners and opening curricula requires an awareness of the structural features of formal education systems. HEIs have historically served as (and maintained) monopolies of knowledge production (Formosa, 2014). This calls into question the extent to which HEIs can promote change, as they are part of society and reproduce its biases. Formal education systems also reward the possession of certain social backgrounds, skills and knowledge, reinforcing dynamics of exclusion.

Nevertheless, HEIs' institutional know-how puts them in a unique position to bring together different social stakeholders and design new knowledge architectures. This entails an intersectional perspective – that is, an awareness of the different types of disadvantages that often reinforce each other – and the inclusion of participatory, work-based and student-led learning methodologies (Formosa, 2014; Hortigüela Alcalá, Picos and López-Pastor, 2018). Ultimately, LLL in HEIs should follow a concept of open science that is relevant to the societies it serves and creates space for underserved communities and knowledge systems.

Recommendation 3.2: Adapt learning formats to address diverse learning needs and include degree- and non-degree programmes as well as different delivery modalities.

In addition to learning content, learning formats and modalities should be adapted to cater to the needs of learners with varying backgrounds and prior experiences. LLL is pursued for a variety of reasons – for the workplace, personal fulfilment and enjoyment, to stay active in older age and more. LLL is not just about updating skills but also about updating interests, knowledge and understanding throughout life (Osborne, 2003). Enabling a variety of learning experiences encourages learners, especially disadvantaged learners, to engage in higher education but also to consider further

education, employment or certification. Offering both comprehensive study programmes and short-term courses in areas beyond the traditional fields of study is therefore necessary to strike an appropriate balance between these different goals (Carlsen et al., 2016).

Short-term courses can provide learners with an opportunity to experience the world of higher education without the long-term commitment that a higher education degree entails. These courses may be formal or non-formal and should be supported by alternative assessment approaches, such as the identification of experiences, documentation of those experiences, a formal assessment and certification of the results of the assessment (Looney and Santibañez, 2021). In addition, different modalities, including the possibility to switch between full- and part-time study, and to take breaks when needed, enable non-traditional learners to participate in higher education while accommodating family and work responsibilities.

Recommendation 3.3: Expand flexible learning pathways, including the RVA of prior learning, across HEIs.

A practical tool to widen access to higher education and facilitate LLL are flexible learning pathways (FLP). FLP allow learners to enter and re-enter higher education at various points of their lives. This enables individualised and learner-centred education and acknowledges that learning occurs throughout life in a variety of contexts and for a variety of purposes. A key aspect of FLP is the recognition, validation and accreditation (RVA) of prior learning, especially when supported by national qualification frameworks (NQF). Most HEIs require a secondary school certificate to enter a degree programme, making admission procedures that do not account for the variety of learning that can equip individuals with the skills necessary to participate in higher education procedures a major obstacle to widening access (Vuorinen, 2012). In the absence of procedures that recognise various forms of learning, LLL remains undervalued.

Approaches to counter this include open-access programmes and the RVA of alternative forms of learning and facilitating the transferability of qualifications across national borders and institutions (Carlsen et al. 2016). Open access programs are open to all learners, regardless of their background. RVA recognises alternative forms of accreditation, such as certificates and badges, industry certification by employers, or micro-credentials. For continuing education programmes, there are sometimes alternative pathways to higher education that are often more flexible in terms of access but should be expanded to include regular study admissions. Aside from RVA, flexibility is enhanced through various arrangements that guide learners on flexible pathways, including support in navigating the bureaucracy of higher education systems or counselling to ease the transition back into the education system.

Recommendation 3.4: Develop further the potential and inclusivity of technology-enhanced learning to benefit non-traditional learners.

A main way of increasing the flexibility of higher education pathways, programmes and provision is through technology-enhanced learning, because it offers a simple and cost-effective way of widening access and participation to higher education. Technology-enhanced learning – recently accelerated by the COVID-19 pandemic – enables more flexibility between in-person, distance, online and blended learning formats (Kirkwood and Price, 2014). This mainly concerns online teaching and learning, but also more sophisticated methodologies – such as learning supported by mobile technology, social media and artificial intelligence integrated into courses and platforms – as well as enhanced opportunities for adaptive and self-led learning.

The democratizing influence of technology (i.e., increasingly easy access from anywhere at any time) gives students greater autonomy for their own learning, allowing them to decide what, when and with whom they learn. This is not without its challenges, however, particularly in terms of access, infrastructure, connectivity and digital skills. Distance learning has contributed to feelings of isolation and a lack of belonging and may be challenging for non-traditional learners in LLL programmes with

little prior experience in higher education and family or work responsibilities (Gourlay et al., 2021). This points to the crucial support mechanisms that technology-enhanced learning requires, both for learners and educators, who must adapt to changing pedagogical methods (Cendon, 2018). Moreover, it underscores the need for careful consideration of the rationale and goals of using specific technologies and their purposeful and ethical use in higher education.

Recommendation 4.4: HEIs should expand their engagement with local communities.

Another aspect of widening access to HEIs relates to their engagement with local communities. HEIs are important players in regional and local development, fulfilling their social responsibility through knowledge transfer, participatory research and student volunteering. As such, HEIs take on an active developmental role, following an understanding of education as a public good and HEIs as accessible and participatory institutions of knowledge-production and -sharing. Such engagement is naturally linked to the third mission of higher education, but HEIs can also promote social, economic, and cultural benefits through their other core missions of teaching and knowledge production. All three aspects cater to the needs of the wider community, particularly vulnerable groups, by increasing access to learning resources and services and conducting community-engaged research with relevance to local economies and communities (Breznits and Feldman, 2012).

HEIs can assume different roles during community engagement, including as stakeholders, strategic partners and advocates or service providers of teaching and learning. Meaningful community engagement is based on an equal and mutually beneficial relationship, wherein HEIs interact with local stakeholders in a manner that actively engages with the latter's knowledge and expertise (Ó Tuama, 2019). Collaborative partnerships, in which HEIs and communities work towards a common goal, turn communities into partners in the process knowledge production. Promoting LLL opportunities for everyone, through engaged research, teaching and learning, student volunteering, evidence-based strategies and advocacy, among others, must be part of universities' broader strategy of becoming engaged and socially responsible. The increasing engagement of universities in the growing learning city movement, including the Global Network of Learning Cities (GNLC), provide a convincing illustration of such a strategy (UIL, 2017).

Concluding remarks

By establishing an enabling environment and strategic guidelines for changes to take place, national policies, strategies and frameworks are fundamental to transforming HEIs into LLL institutions. Nevertheless, transformational actions must be undertaken by HEIs themselves, in all aspects of their operations and across their three core missions. A starting point is to establish institutional LLL policies and strategies. They must be comprehensive, relate to each department and unit of the institution, and be backed up with strong commitment from senior leaders and support by staff at all levels.

Following an institutional strategy, changes and adaptations must be developed to implement supporting mechanisms, organizational structures and resources. At the organizational level, a dedicated and transversal lifelong learning unit can function as a hub to coordinate the implementation of the institutional LLL policies and strategies, facilitate shared understanding, and build up knowledge and expertise, thereby promoting a whole-institution approach to LLL. Funding is fundamental for this. Public funding, but also other innovative financing strategies, are required to secure the necessary resources to implement LLL programmes. In view of the diverse formats of LLL offerings, quality assurance is central to ensure that programmes are well designed and implemented with sufficient and adequate outcomes. In the long-term, quality assurance through monitoring and evaluation contributes to the professionalisation of LLL and the expansion of academic and financial investment for LLLs in HEIs.

Strategic approaches to turning HEIs into LLL institutions include widening access and increasing participation for new categories of learners, including from the most disadvantaged strata of society.

Such inclusive expansion requires new pedagogies, changes in learning modalities and support services favouring the provision of flexible learning pathways. Structural adaptations are needed to enable entry and re-entry points into higher education at all ages, and to strengthen links between formal and non-formal structures as well as between vocational and academic-oriented education. In addition, mechanisms for the RVA of the knowledge, skills and competences acquired through nonformal and informal learning can constitute a strong instrument for flexible learning pathways. Technology-enhanced learning opportunities increasingly contribute to making learning more accessible and flexible, responding to the needs of a diversity of learners. Eventually, by addressing the learning needs of a large variety of citizens and promoting localised approaches, HEIs are becoming active agents of sustainable and equitable development.

While the directions outlined here are meant to be of general relevance, their actual implementation at the institutional level must be tailored to specific national contexts and to the unique characteristics of HEIs. This policy brief does not present a one-size-fits-all solution but is intended to encourage policymakers and HEIs leaders to act and initiate change to embrace the full potential of higher education for LLL and, ultimately, sustainable development.

Acknowledgment: This policy brief is based on joint contributions by Mo Wang, Programme Specialist at UIL and Nora Lorenz, Assistant Programme Specialist at UIL.

References

Altbach, P. G., Reisberg, L. and Rumbley, L. E. 2009. *Trends in global higher education: Tracking an academic revolution.* Paris, UNESCO.

Bejan A. -S., Janatuinen, T., Jurvelin, J., Klöpping, S., M, H., Minke, B. and V, R. 2015. Quality assurance and its impact from higher education institutions' perspectives: Methodological approaches, experiences and expectations. In: *Quality in Higher Education*, 21(3), pp. 343-371.

Brennan, J., and Magness, P. 2019. *Cracks in the ivory tower: The moral mess of higher education*. Oxford, Oxford University Press.

Breznitz, S. M. and Feldman, M. P. 2012. The engaged university. In: *Journal of Technology Transfer*, [e-journal] 37, pp. 139–157. Available through: 10.1007/s10961-010-9183-6 [Accessed 28 March 2022].

Carlsen, A., Holmberg, C., Neghina, C., and Owusu-Boampong, A. 2016. *Closing the gap: Opportunities for distance education to benefit adult learners in higher education*. Hamburg, UIL.

Cendon, E. 2018. Lifelong learning at universities: Future perspectives for teaching and learning. In: *Journal of New Approaches in Educational Research*, 7(2), pp. 81–87.

Chan, L., Hall, B., Piron, F., Tandon, R. and Williams, L. 2020. *Open science beyond open access: For and with communities. A step towards the decolonization of knowledge*. Prepared for the Canadian Commission for UNESCO's IdeaLab, Ottawa, July 2020. [PDF] Available at: http://unescochair-cbrsr.org/wp-content/uploads/2020/07/OS For and With Communities EN.pdf [Accessed 28 March 2022].

Chapman, B., Dearden, L., and Doan, D. 2020. Global higher education financing: The income contingent loans revolution. In: C. Callender, W. Locke and S. Marginson. eds. *Changing Higher Education for a Changing World*, pp. 87–100. [PDF] London, Bloomsbury Academic. Available at: https://bit.ly/2X7RCpT [Accessed 28 March 2022].

Chiţiba, C. A. 2012. Lifelong learning challenges and opportunities for traditional universities. *Procedia – Social and Behavioral Sciences*, [online] Available at: https://doi.org/10.1016/J.SBSPRO.2012.05.408 [Accessed 28 March 2022].

De Viron, F. and Davies, P. 2015. From university lifelong learning to lifelong learning universities: Developing and implementing effective strategies. In: J. Yang, C. Schneller and S. Roche. *The Role of Higher Education in Promoting Lifelong Learning*. [PDF] Hamburg, UIL. Available at: https://files.eric.ed.gov/fulltext/ED564050.pdf [Accessed 28 March 2022].

EUA (European University Association). 2008. *European universities' charter on lifelong learning*. [online] Brussels, EUA. Available at: https://eua.eu/resources/publications/646:european-universities%E2%80%99-charter-on-lifelong-learning.html [Accessed 24 March 2022].

Fongwa, S., Marais, L., and Atkinson, D. 2014. Universities and regional development: Lessons from the OECD Regional Assessment of the Free State, South Africa. *Journal of Higher Education in South Africa*, [online] Available at: https://www.researchgate.net/publication/291823948 Universities and Regional Development Lessons from the OECD Regional Assessment of the Free State South Africa [Accessed 28 March 2022].

Formosa, M. 2014. Four decades of Universities of the Third Age: Past, present, future. [e-journal] *Ageing & Society*, 34, pp. 42–66. Available through: 10.1017/S0144686X12000797 [Accessed 28 March 2022].

Foster, M. and McLendon, L. 2012. Sinking or swimming: Findings from a survey of state adult education tuition and financing policies. [online] *CLASP* (*Center for Law and Social Policy*). Available at:

https://www.clasp.org/publications/report/brief/sinking-or-swimming-findings-survey-state-adult-education-tuition-and [Accessed 28 March 2022].

Gourlay, L., Campbell, K., Clark, L., Crisan, C., Katsapi, E., Riding, K. and Warwick, I., 2021. 'Engagement' discourses and the student voice: Connectedness, questioning and inclusion in post-Covid digital practices. *Journal of Interactive Media in Education*, [online] Available at: http://doi.org/10.5334/jime.655 [Accessed 28 March 2022].

Hortigüela Alcalá, D., Picos, A. and López-Pastor, V. M. 2018. The impact of formative and shared or co-assessment on the acquisition of transversal competences in higher education. *Assessment & Evaluation in Higher Education*, [e-journal]. Available through: 10.1080/02602938.2018.1530341 [Accessed 28 March 2022].

Jacob, W. J. and Gokbel, V. 2018. Global higher education learning outcomes and financial trends: Comparative and innovative approaches. *International Journal of Educational Development*, [e-journal] 58, pp. 5–17. Available through: http://dx.doi.org/10.1016/j.ijedudev.2017.03.001 [Accessed 28 March 2022].

Johannesen, H.S., Øyan, P. and Magnus, E.M. 2018. 'Back into your arms' - Exploring models for integrated

university-professional learning in a lifelong perspective. *Widening Participation & Lifelong Learning*, 20(2), pp. 96–121.

Kirkwood, A. and Price, L. 2014. Technology-enhanced learning and teaching in higher education: What is 'enhanced' and how do we know? A critical literature review. *Learning, Media and Technology*, 39(1), pp. 6–36.

Looney, J. and Santibañez, B. 2021. Validation of non-formal and informal learning to support disadvantaged learners: Alternative assessments. *European Journal of Education*, 56(3), pp. 439–453.

Marginson, S. 2016. The worldwide trend to high participation higher education: Dynamics of social stratification in inclusive systems. *Higher Education*, 72(4), pp. 413–434.

Martin, M. and Godonoga, A. 2020. *SDG 4 – Policies for flexible learning pathways in higher education. Taking stock of good practices internationally.* IIEP–UNESCO Working Papers. Paris, IIEP–UNESCO.

Milic, S. 2013. The twenty-first century university and the concept of lifelong learning. *Australian Journal of Adult Learning*, 53(1), pp. 159–179.

OECD (Organisation for Economic Co-operation and Development). 2017. *The OECD Handbook for Innovative Learning Environments*. [PDF] Paris, OECD Publishing. Available at:

https://espas.secure.europarl.europa.eu/orbis/sites/default/files/generated/document/en/9617031e.pdf [Accessed 24 March 2022].

Orazbayeva, B. 2017. The role of universities in promoting and providing lifelong learning—DUK's strategic approach. *UIIN (University Industry Innovation Network)*. Available at: https://blog.uiin.org/2017/07/the-role-of-universities-in-promoting-and-providing-lifelong-learning-duks-strategic-approach/ [Accessed 16 April 2021].

Osborne, M. 2003. University continuing education – International understandings. In: M. Osborne and T. Edward. eds. *Lifelong Learning in a Changing Continent: Continuing Education in the Universities of Europe*. Leicester, NIACE, pp. 15–30.

Osborne, M., Rimmer, R., and Houston, M. 2015. Adult access to higher education: An international overview. *The Role of Higher Education in Promoting Lifelong Learning*. Leicester, NIACE, pp. 17–39.

Ó Tuama, S. 2019. Community-engaged universities. Approaches and context. Adult Learning, [e-journal] 30(3), pp. 95–98. Available through: https://doi.org/10.1177/1045159519853804 [Accessed 28 March 2022].

Ratana-Ubol, A. and Richards, C. 2016. The eight pillars of lifelong education: Thailand University Ch. 1. Bangkok, Chulalongkorn University Press.

Slowey, M. and Schuetze, H. G. 2012. All change—no change? Lifelong learners and higher education revisited. *Global Perspectives on Higher Education and Lifelong Learners*, [online] Available at:

https://www.researchgate.net/publication/257926476_Higher_Education_and_Lifelong_Learners_International_Per spectives_on_Change [Accessed 28 March 2022].

Šmídová, M., Šmídová, O., Kyllingstad, N. and Karlsen, J. 2017. Regional development: Lifelong learning as a priority in Norway and the Czech Republic? *Higher Education Policy*, 30(4), pp. 499–516.

UIL (UNESCO Institute for Lifelong Learning). 2017. *Learning cities and the SDGs: A guide for action*. [PDF] Hamburg, UIL. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000260442_eng [Accessed 15 March 2022].

UIS (UNESCO Institute for Statistics). 2020. UIS releases more timely country-level data for SDG 4 on education. *UNESCO Institute for Statistics* [online] (last updated on 26 February 2020). Available at:

http://uis.unesco.org/en/news/uis-releases-more-timely-country-level-data-sdg-4-education [Accessed 14 March 2022].

UNDESA (United Nations Department of Economic and Social Affairs). 2022. *Goals. 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.* [online] New York, United Nations. Available at: https://sdgs.un.org/goals/goal4 [Accessed 23 March 2022].

Vuorinen, R. 2012. Pathways and flexible learning opportunities – Implications for lifelong career management skills and comprehensive guidance systems. In: M. Polak. ed. *Developing Cooperation between VET, Higher Education and Adult Learning in Response to the Challenge of Lifelong Learning*. Warsaw, Foundation for the Development of the Education system (FRSE), pp. 211–217.