

Chapter 2

Open Educational Resources: A Catalyst for Social Justice and Equality



Ebba Ossiannilsson 

Abstract An important step toward quality education and universal access to information was taken when the General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) adopted the Recommendation on Open Educational Resources (OER) in November 2019. Five areas of actions are outlined in the UNESCO OER recommendation: Capacity Building; Policy; Inclusivity, Equitable Quality OER; Sustainability Models; and the Promotion and Strengthening of International Cooperation. The OER Recommendation will contribute to and catalyse human rights, equity and social justice. Through the recommendation the United Nations (UN) Sustainable Development Goals (SDGs) can be achieved, and open and inclusive knowledge societies can be build. The Recommendation will support the development and sharing of openly licensed learning and teaching materials based on universal design for the benefit of students, educators, and researchers worldwide. Although the term OER and the concept were coined already in 2002, its implementation at all levels, e.g.-nano, micro, meso, macro, and meta-has been far too slow. The social, ethical and moral dimensions of learning and education must be seriously considered as a priority in the agenda for social justice, equality and human rights, prosperity, liberation and growth in line with major global initiatives. This conceptual chapter, focusing on OER, discusses even micro-redentials, universal markers for learning, and open pedagogical approaches to fulfil the promise of resilient, sustainable, and high-quality open education in the ecosystem of a new social contract.

Keywords Equality · Human rights · Liberation · Micro-credentials · OER · Open education · SDG · Quality and ecosystem · Social contract · Social justice

E. Ossiannilsson (✉)

International Council for Open and Distance Education, Oslo, Norway
e-mail: Ebba.Ossiannilsson@gmail.com; info@i4quality.se

Swedish Association for Open, Flexible and Distance Education, Lund, Sweden

2.1 Introduction

The concept of education as a human right means that the right to education is guaranteed by law for all without discrimination. States have a duty to protect, respect and fulfil the right to education and are accountable for violations of the right to education. The United Nation (UN), and the United Nations Educational, Scientific and Cultural Organization's (UNESCO) Sustainable Development Goal (SDG) 4 is one of 17 SDGs set by UNESCO in 2015 (UNESCO, 2015), Education is a force for sustainable development and peace and is valued as a fundamental human right. Every goal of the 2030 Agenda requires that education equips people with the knowledge, skills, and values they need to live with dignity, shape their lives, and contribute to their societies. Therefore, education is an essential prerequisite for enjoying all other human rights and an effective tool for economically and socially excluded adults and children to lift themselves out of poverty and participate fully as citizens. Although education is recognised as a universal human right, many people worldwide lack access to essential educational opportunities.

The General Conference of UNESCO adopted the Recommendation on Open Educational Resources (OER) in November 2019, and an important step toward quality education and access to information for all was taken. The recommendation outlines five action areas: Capacity Building, and Utilization OER; Developing Supportive Policies, Publicity, Inclusivity, Equitable Quality OER, Sustainability Models, and Promoting and Strengthening International Cooperation. In addition to the five areas, recommendations were also made for monitoring and evaluation. The recommendation will contribute to and categorise human rights, equity, liberation, and social justice. The recommendation will also contribute to building open and inclusive knowledge societies and achieving the United Nations Sustainable Development Goals (UN SDG). The OER recommendation empower the development and sharing of openly licensed learning and teaching materials with universal design for the benefit of students, educators, and researchers worldwide. Although the term OER was coined in 2002, its implementation at all levels—macro, meso, micro, and nano has been too slow.

In the agenda for social justice, equality, and human rights, and for prosperity, liberation, and growth, in line with major global initiatives the social, ethical, and moral dimensions of learning and education must be given high priority (UNESCO, 2019).

The scope of this chapter is broad, as it deals with openness in education. However, it focuses on OER as a catalyst for social justice, equity, human rights, and education for all in the context of lifelong learning, where online learning serves as a vehicle for change. This chapter also discusses ways to deliver on the promise of resilient, sustainable, and high-quality open education in the context of a new social contract.

After this brief introduction, this concept paper is organised as follows. First, the research question and methodology are described, followed by a discussion of the UNESCO OER recommendation and its implementation, monitoring, and evaluation. This is followed by discussions of an ecosystem of openness and the need for

radical change to achieve the SDGs, the new social contract, and quality education for all. This is followed by a discussion of OER as a catalyst for systemic change towards a new social contract and knowledge-based action to transform education to ensure its global sustainability, which is a key concern. The conclusion provides recommendations for future steps to achieve the UN SDGs.

2.2 Research Question and Methodology

The research question for this conceptual chapter focuses on OER as a catalyst for social justice and equality.

A systematic review of the literature, including official reports from the major international organisations in this area, forms the theoretical basis of this chapter. The review is based on the author's research, experience, and perspectives gathered over almost 20 years. The review was conducted systematically to examine the processes of information gathering, assessment, and data analysis (Creswell & Creswell, 2018). The author selected examples from the ongoing international discourse on the challenges and opportunities of lifelong learning and the future of education, drawing primarily on official international sources. OER and the openness of education were particularly among the criteria for this conceptual chapter.

2.3 The OER Movement as a Catalyst for Social Justice and Human Rights

2.3.1 Human Rights and Sustainability Goals

The 1948 Universal Declaration of Human Rights (UDHR) is a landmark in the history of human rights. Education must be free, at least at the elementary and primary levels. Education must be directed toward the full development of the human personality and reinforce respect for human rights and fundamental freedoms (United Nations, n.d.). Article 19 in the UDHR includes the right to seek, receive, and disseminate information and ideas through any media and regardless of borders. Although individuals enjoy the same rights online as offline, states sometimes censor and criminalise a wide range of online content through vague or ambiguous laws, even though Article 26 states that everyone has the right to education.

The SDG Agenda 2030, adopted by all United Nations Member States (UN) in 2015, is a shared blueprint for peace and prosperity for people and the planet, now and in the future. At its heart are the 17 SDGs, which represent an urgent call to action for all countries—developed and developing—in a global partnership. They are based on recognising that eradicating poverty and other deprivations must go hand in hand with strategies that improve health and education, reduce inequality, and spur

economic growth while combating climate change and protecting our oceans and forests (United Nations, n.d.). According to the Incheon Declaration and Framework for Action for the Implementation of the Sustainable Development Goal (SDG 4), inclusive and equitable quality education should be ensured, and lifelong learning opportunities for all should be promoted (UNESCO, 2016). SDG 4 builds on the UDHR and is one of the 17 SDGs identified by the UN in September 2015.

The goal is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030. By 2030, the goal is to ensure that all children worldwide have access to quality early childhood development, care, and preschool education to prepare them for primary education and receive free primary and secondary education. It also aims to ensure equal access to affordable vocational training and eliminate gender and wealth inequalities to achieve universal access to quality higher education. The seven results-based goals are: universal primary and secondary education, early childhood development and universal preschool education, equitable access to technical/vocational education and higher education, relevant skills for decent work, gender equality and inclusion, universal literacy for youth, and education for sustainable development and global citizenship. SDG 4 is based on four pillars: social, human, economic and environmental (UNESCO, 2016).

2.3.2 UNESCO OER Recommendation

The obligations of UN are based on the Universal Declaration of Human Rights (Article 19) and the right to education (Article 26). In addition, UNESCO's constitutional commitment to the free exchange of ideas and knowledge supports the sharing of knowledge through technology. The normative instruments of the UNESCO are conventions, recommendations and declarations. The OER recommendation makes recommendations to UNESCO Member States on actions that could be taken in a particular area and requires Member States to report regularly on these actions. A recommendation is flexible enough to be quickly adapted to ongoing technological developments. UNESCO believes that consistent access to quality education contributes to peace, sustainable social and economic development, and intercultural dialogue.

The UNESCO OER recommendation aims to contribute to the promotion of human rights, equality and social justice. The Recommendation will help build open and inclusive knowledge societies and achieve the SDGs by the UN. According to UNESCO OER provides a strategic opportunity to improve the quality of education and promote policy dialogue, knowledge exchange, and capacity building (UNESCO, 2019). The recommendation will support the development and sharing of openly licensed learning and teaching materials that benefit students, educators, and researchers worldwide (Ossiannilsson, 2021a, 2021b, 2021c, 2021d; Ossiannilsson in press).

The Recommendation on OER, unanimously adopted by the UNESCO General Conference at its 40th session in November 2019, supports the creation, use and

adaptation of inclusive and high-quality OER and facilitates international cooperation in this field, and is the result of more than a decade of efforts by a wide range of stakeholders in this field. The Recommendation is the only existing international standardisation tool for the implementation of OER. It is the result of more than a decade of efforts to bring together a wide range of stakeholders (UNESCO, 2019).

At the international level, the adoption of the recommendation represents a critical step toward building open and inclusive knowledge societies and achieving the 2030 Agenda through UN. Implementation of the Recommendation will contribute to the achievement of at least six SDGs: SDG 4 (quality education), SDG 5 (gender equality), SDG 9 (industry, innovation and infrastructure), SDG 10 (reducing inequalities within and between countries), SDG 16 (peace, justice and strong institutions), and SDG 17 (partnerships to achieve the goals) (UNESCO, 2021a, 2021b). To implement the actions identified in the recommendation, UNESCO has launched the OER Dynamic Coalition, a multi-stakeholder mechanism to facilitate international and regional collaboration UNESCO, 2019).

The following definitions of OER and Open License were revised in connection with the Recommendation on November 25, 2019 (UNESCO, 2019, p. 1):

1. Open educational resources (OER) are learning, teaching, and research materials in any format and medium that reside in the public domain or are under copyright that has been released under an open license and that permit no-cost access, reuse, repurpose, adaptation, and redistribution by others.
2. An open license is a license that respects the intellectual property rights of the copyright owner and provides permissions granting the public the right to access, reuse, repurpose, adapt, and redistribute educational materials

In addition, the use of information and communication technologies (ICTs) has been redefined to emphasise that they offer great potential for effective, equitable, and inclusive access to, use of, adaptation of, and redistribution of OER. ICTs can expand the possibility that OER is accessible to everyone, everywhere, and at all times, including people with disabilities and members of marginalised and disadvantaged groups. They can also help meet the needs of individual learners, effectively promote gender equality, and incentivize innovative pedagogical, didactic, and methodological approaches (UNESCO, 2019).

The recommendation also highlighted a large group of stakeholders in the formal, informal, and non-formal sectors (where applicable), which now include the following: Teachers, educators, learners, government agencies, parents, education providers and institutions, educational support staff, education policy makers, cultural institutions (e.g., libraries, archives, and museums) and their users, ICT providers, researchers, research institutions, civil society organisations (including professional and student associations), publishers, public and private sectors, inter-governmental organisations, copyright holders and authors, media and broadcasters, and funding agencies (UNESCO, 2019). These changes demonstrate that the recommendation is truly inclusive of stakeholders at all levels-meta, macro, meso, micro, and nano-and that each is not only advisory, but also responsible for integration, implementation, monitoring, and evaluation.

The terms open content and OER refer to any copyrightable work (traditionally excluding software, which is described by other terms such as “open source”) that is licensed to grant the following rights (5Rs) (Wiley, 2014 n.p.):

- Retain-the right to make, possess, and control copies of the content (e.g., download, reproduce, store, and manage).
- Reuse-the right to use the content in a variety of ways (e.g., in class, in a study group, on a website, in a video).
- Revision-the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language).
- Remix-the right to combine the original or revised content with other material to create something new (e.g., to embed the content).
- Redistribution-the right to distribute copies of the original content, revisions, or their combination to others.

Subsequently, two additional stakeholder rights were introduced: recognition (Svetlana Knyazeva, personal communication, n.d. 2017; Ossiannilsson, 2021a, 2021b, 2021c, 2021d; Ossiannilsson in press) and recontextualisation (Ossiannilsson, 2021a, 2021b, 2021c, 2021d). One should be recognised not only for one’s work, implementation, and integration in OER but also for one’s professional development and contribution to one’s field. Recontextualisation can be understood as using the 5Rs to contextualise them for one’s own purposes and context.

In summary, the OER recommendation will achieve SDG4 for all. The recommendation is broad in scope and involves all stakeholders at all levels. In addition to the overall goals of the recommendation and the SDGs, there are the following benefits: increased access to learning by allowing students to access OER anytime, anywhere in the world, and to use materials repeatedly. In terms of scalability, OER can be widely disseminated easily and at little or no cost, and course resources can be adapted to better meet learning outcomes. However, the work on OER must be taken seriously, and it is important to consider for whom and where OER are being developed. Several issues remain unresolved, such as gender, diversity, multilingualism, geographic balance (i.e., global North versus global South), lack of face-to-face faculty-student interactions, technological issues, and language and/or cultural barriers. In addition, issues of intellectual property/copyright, sustainability, and quality are often raised (Ossiannilsson, 2021a, 2021b, 2021c, 2021d). However, these concerns and dilemmas are addressed in the UNESCO OER recommendation. In addition, how information is shared with stakeholders is critical. Narratives and values are important for developing and shaping an inclusive, equitable learning landscape. This is not just about the availability of facts and figures to the public but also about communication strategies, culture, and narratives.

The following sections contain reflections on topics related to OER, such as the dimensions of open movement, including the ecosystem of openness, universal design, and microcredentials.

2.3.3 *The Ecosystem of Openness*

2.3.3.1 A Systemic Approach to the Ecosystem of Openness

Openness consists of several dimensions related to different knowledge paradigms, and an ecosystem is crucial. Openness relates to innovation, knowledge, ideas, resources, communication, diversity, inclusion, culture, mindset, government, and people (Ossiannilsson, 2018; Ossiannilsson, in press).

The 2007 Cape Town Declaration on Open Education accelerated efforts to promote openness across a broad range of issues, advocating for open resources, technologies, and teaching methods, as well as an open culture in education. In honour of its 10th anniversary, a retrospective was held to launch CPT10 + , which identified ten key directions for advancing open education: open communication, empowering the next generation, connecting with other open movements, open education for development, open pedagogy, thinking outside the institution, data and analytics, beyond the textbook, opening publicly funded resources, and copyright reform for education. Even more directions can be identified (Cape Town Open Education Declaration, 10th Anniversary, 2017, p.3).

Open education is an educational movement based on openness with links to other educational movements, such as critical open pedagogy, which is based on an educational stance that advocates broader participation, democracy, and inclusion in society. The most important features of open education are free, unfettered, anytime, anywhere access to educational resources that are meaningful and useful to those who wish to use them. Open education, which began in the late 1960s with the creation of open universities and gained momentum in the first half of this century with OER and open technologies, is part of broader efforts to democratise education. Open education, focused on access, agency, ownership, participation, and experience, has the potential to become a significant global equaliser, enabling people around the world to enjoy the basic human right to education (Blessinger & Bliss, 2018).

The Joint Research Center considers open education as an umbrella term under which different conceptions of open education can be grouped. In Europe, especially in higher education, the term open education does not only refer to the opening of educational materials under an open license. Nor does it refer only to the availability of open access research in repositories. However, these two aspects can and should be included in the broad concept of open education. Open education has become increasingly important in European higher education, as digital technologies are one of the main drivers for the modernization of education. The use of digital technologies in teaching and learning is no longer limited to open or virtual universities, but has expanded to all types of institutions, both traditional and innovative (Inamorato dos Santos, 2016). Open education can provide individuals with appropriate and meaningful educational opportunities at every stage of their lives and professional development. This includes access to content, courses, support, assessment, and certification in flexible ways that meet a variety of needs. Barriers related to access or cost, for example, are reduced or eliminated. Based on this broad approach to open education,

a framework has been proposed that includes multiple uses to promote transparency and a holistic approach to practice. Open education goes beyond OER, MOOCs, and open access to encompass 10 dimensions of open education. The framework can be used as a tool for making strategic decisions about pedagogical approaches, collaboration between individuals and institutions, recognition of non-formal learning, and different ways of delivering content.

2.3.3.2 Microcredentials

Time and space have become more seamless with the Internet and the increasing use of online learning. Learning takes place more or less anywhere and in a wide variety of places. Learning options that take less time than traditional qualifications are therefore being rapidly developed around the world. Various public and private providers offer these options in response to the demand for more flexible, learner-centred forms of education and training. OER can be stand-alone learning materials or integrated into courses and course modules. Weller (2010) argued that much of the attention given to OER has focused on institutional projects that explicitly provide learning content. These can be classified as “large OER”, but individually created “small OER” can also use web services. Weller highlighted some differences between these two types of OER to illuminate open education issues. These include attitudes toward reputation, intentionality of the resource, models of sustainability, the implicit capabilities of the resources, and the context of their hosting sites.

OER can be considered microlearning because they can usually be used as stand-alone modules and/or objectives. Therefore, it is also important to consider microlearning as a concept and phenomenon (Ossiannilsson, 2020). Microlearning is based on relatively small learning units and short-term learning activities. Microcredentials certify the learning outcomes of short-term learning experiences, such as short courses or training sessions. They provide a flexible, targeted means to help people develop the knowledge, skills, and competencies they need for personal and professional development, and to be recognized for their learning achievements (European Commission, 2021a, 2021b)

People around the world need to update their knowledge, skills, and competencies to bridge the gaps between their formal education and the demands of a rapidly changing society and labour market. In addition, recovery from the COVID-19 pandemic and the need to accelerate green and digital transformation require people to continue their education or retrain. Maintaining and acquiring new skills is critical to enable active participation in society, ensure continued personal, social, and professional development, and promote employability and socioeconomic inclusion. However, without common standards that ensure quality, transparency, cross-border comparability, recognition, and transferability, microdiplomas cannot reach their full potential. Microcredentials can be particularly useful for people who want to continue their education or retrain to meet the demands of the labour market or to develop professionally after taking up employment. They offer a flexible, targeted way to help people develop the knowledge, skills, and competencies they need for personal and

professional growth. Because of their flexibility, microcredentials can be developed and delivered by a wide range of providers in many different formal, non-formal, and informal learning environments.

According to the European Commission (2021b), individuals must acquire the knowledge, skills, and competencies they need to succeed in a changing labour market and society and to benefit fully from a socially just recovery and a fair transition to a green and digital economy. The European Commission's proposal aims to ensure that micro certificates are valid across institutions, companies, sectors and borders. To this end, the European Commission empower Member States to agree on (i) a common definition of microcredit cards, (ii) standard elements for their description, and (iii) key principles for their signing and issuance. The aim is to ensure that microcredit cards are of high quality and that they are issued in a transparent manner to build trust in what they certify. This should encourage the use of microcredentials by learners, workers, and job seekers who can benefit from microcredentials. The proposal includes recommendations for micro-credentials in education, training and labour market policies that would allow people to acquire new or additional skills in a tailored and inclusive way. The European approach to micro-credentials is an important basis for the creation of a European education area by 2025. They could be part of the learning included in individual learning accounts.

2.3.3.3 Universal Design

Although learning is universal, learning styles and pathways are individual. Learning is also subject dependent. To reduce barriers to learning, it is important to provide appropriate support and ensure that information is equally accessible to all learners by presenting the same content in different materials. Universal Design for Learning (UDL) aims to provide all learners with the same opportunities for success. UDL is an instructional approach that consists of proactively designing and using inclusive instruction, courses, materials, and content that benefit all types of learners without the need for adaptations or retrofitting and assessment strategies (Wikipedia, n.d). This process is about designing products (e.g., devices, environments, and systems) so that they can be used by people with different abilities in a variety of situations (e.g., environments, conditions, and circumstances). Universal design has evolved from the slightly older concept of accessibility, the broader accessibility movement, and adaptive and assistive technology. It also seeks to connect aesthetics to these core considerations. This approach to teaching and learning provides flexibility in how students can access the material and demonstrate their knowledge. UDL also looks for other ways to engage students. This approach provides academic access to a wide range of learners, including students with disabilities, while maintaining academic standards so that fewer remedial courses are required when a course is already in progress. UDL not only provides equal access to learning, but also equal access to information. UDL allows students to determine their own method of accessing information while the instructor monitors the learning process and introduces useful methods as

needed. It should be noted that UDL does not eliminate academic challenges, but reduces barriers to access.

According to the OER recommendation of UNESCO OER should be accessible to all without barriers (UNESCO, 2019). Therefore, the development and use of OER is not only about open licences, but also about the consistent universal design and use of accessible services. At the heart of many open education projects is access to education. So what does access mean? If the materials are not accessible to every single student, do they fulfil the mission of providing a fully open education? The open education movement has helped people in different parts of the world gain access to content that would not otherwise be available to them. OER lowers costs for students and allows teachers more flexibility. Accessibility could help promote the open movement even further. The three UDL principles are inclusion, representation, and action and expression. In most learning platforms, such as MOODLE, the tools are built into the system. Other tools include W3C, WCAG, H5P, and Ally.

The OER Accessibility Toolkit complements Universal Design and Universal Design for Learning (UDL), a set of principles for developing curriculum that provides equal learning opportunities for all. UDL provides a blueprint for developing instructional objectives, methods, materials, and assessments that are appropriate for all. It is not a one-size-fits-all solution but a flexible approach that can be customised (Open UBC, 2021). The principles of UDL can be summarised as follows:

- Information and content should be presented in a variety of ways and with the use of diversity.
- Learners should be provided with more than one way to express their knowledge.
- Interest and motivation to learn should be facilitated.

These principles are recommended for OER authors to apply, and to follow the UDL guidelines (Open UBC, 2021):

- Resources and activities should be designed so that learners can use them in different ways. For example, for a text component, offer the ability to increase the font size or change the text colour. For images and diagrams, appropriate text descriptions should always be provided. For videos, subtitles should be provided.
- Learners should always be provided with multiple opportunities to engage with the information and demonstrate their knowledge. This is especially important when designing activities and assessments.
- Activities that require specific sensory or physical skills that may be difficult or impossible to adapt to learner's needs should be identified. For example, a task that requires learners to identify objects by colour might be difficult for learners with visual impairments. For such cases, create a plan for dealing with learners who encounter obstacles.

2.4 Transformation of Education to Achieve the SDGs: The New Social Contract, the Next Normal and Quality

With 2030 less than a decade away, critical thinking and urgent action are critical to achieving the SDGs. The SDGs are a common challenge for all universities and higher education institutions and must be reflected in research, education, and outreach plans and actions. Transformation is a common thread that runs through all of the SDGs and the UN agenda for addressing the global challenges facing humanity and the planet. Putting our world on a more sustainable course requires a radical shift in current development paradigms that exacerbate inequalities and threaten our shared future. This transition depends on new knowledge, new research, and new skills that only universities, rooted in their historic role as service providers to society, can provide. Universities are uniquely positioned to contribute to the social, economic, and environmental changes needed to solve the world's most pressing problems (UNESCO, 2022, n.p). Three interrelated themes of change must be the focus of universities as they advocate for and implement the 2030 Agenda:

- The compelling need to move toward inter- and transdisciplinary forms of knowledge production and dissemination in education and research.
- The compelling need for institutions to promote openness, advance epistemic dialogue, and integrate other forms of knowledge.
- A call for a much stronger presence in society through proactive engagement, outreach, and partnerships with other societal actors to raise awareness and influence policy on environmental degradation and SDGs in general. This includes direct involvement in experimental projects that evaluate solutions involving students.

Recognising the value of life and the need for a high quality of life for all requires strengthening the human rights-based approach to education and research. Human rights for all can only be achieved through the active protection of natural resources and all forms of life. In addition, the power relations that foster inequality and all forms of violence and discrimination must be continually challenged. This includes valuing cultural diversity and recognising the contributions that different cultures can make to achieving the SDGs. The values of equality and inclusion are at the forefront of the implementation of the 2030 Agenda; the commitment to leave no one behind is critical.

The SDGs require a shift in perspectives and practices. Inter- and transdisciplinary approaches to education and research are critical, as only with a holistic approach can adaptive solutions be developed. This underscores the need for universities to become more open institutions, integrating diverse cultures and knowledge systems and adopting a more democratic approach to knowledge sharing. Universities can achieve a much stronger presence in society through awareness-raising, outreach, and partnerships. There is a need to examine the factors that prevent these institutions from contributing meaningfully to achieving the SDGs and thus to a more just, humane, democratic, inclusive, and peaceful future for all. Figuring out how to overcome

these obstacles requires thinking about what kind of knowledge is needed, whose knowledge is needed, and how higher education institutions can address these challenges and their implications both within higher education institutions and beyond in an increasingly diverse yet interdependent society.

The goal is to make sustainability a core practice reflected in structures, programmes, and activities and expose students to real-world problems and immersive experiences. Valuing the well-being of people and the planet and contributing to values that go beyond making money would excite and inspire students and faculty alike. Ultimately, the educational culture at universities and colleges must encourage students to learn through experimentation and critical thinking from diverse perspectives.

Universities and colleges must use the knowledge they produce and the training they provide to new professionals to help solve some of the world's most pressing problems addressed in the SDGs. Humanity is facing unprecedented challenges, particularly around climate change, biodiversity loss, inequality, health, economics, and a range of issues related to the 2030 Agenda. Given this new reality, where the future of humans and other species is at stake, it is time for higher education institutions and their stakeholders to systematically rethink their role and mission in society and consider how they can serve as a catalyst for a rapid, much-needed, and equitable transition to sustainability.

Given the complexity of the issues, solutions should be part of a radical agenda that requires new alliances and incentives. It is also time for higher education institutions to make sustainability and SDG literacy a basic requirement for all faculty and students. Higher education institutions, their leaders, faculty, and students have particular roles and responsibilities for social change, depending on the nature of the institution and the issues at hand. To this end, the structure and culture of higher education institutions must change, and the barriers to necessary change within higher education institutions must be identified and progressively removed. The roles of higher education institutions include knowledge transfer and de-democratisation, as well as raising awareness of the consequences of unsustainable modes of production and consumption, the problems of inequality and exclusion, and the need to make progress in implementing the 2030 Agenda. Education for sustainability should expose students to real problems and immerse them in real issues. Valuing the well-being of people and the planet and contributing to values beyond financial profit will excite and inspire students and teachers alike.

Ultimately, the educational culture at universities and colleges must encourage students to learn through experimentation and critical thinking from diverse perspectives (UNESCO, 2022). It is important to recognise that the SDGs will be phased out in 2030. Although universities are part of this agenda, they should also look to the future and not only to the implementation of the SDGs but also to the development of steps and goals beyond 2030. A long-term perspective is needed for both activities and policies. Universities should critically examine their own practices, curricula, and research and consider how they can motivate their staff, students, and society to do the same. UNESCO states in general terms that universities should strive for equitable representation of all segments of society, both in the student body and in the

faculty, in addition to strengthening lifelong learning activities. The recommendation addresses education, research, outreach, and community engagement.

Specifically, it recommends that government-sponsored quality assurance mechanisms should give due recognition to what is being done at universities to advance the SDGs in the three areas of education, research, and outreach, rather than a ranking system that creates a top-down competition in which the highest recognition is given to those that holistically address a large number of SDGs in all their activities. It is important to remember that the UNESCO report was completed at a time when many countries were experiencing a new wave of COVID-19 that has affected many aspects of humanity since 2020. COVID-19 is a serious consequence of an unsustainable way of dealing with nature. The impact of this pandemic on poverty, inequality, and the environment underscores the call for higher education institutions to strengthen their commitment to the 2030 Agenda to achieve a healthier, more sustainable, and more inclusive world. Higher education institutions are uniquely positioned to contribute to the social, economic, and environmental changes needed to solve the world's most pressing problems (UNESCO, 2022).

The European Commission believes that universities in Europe occupy a unique position at the crossroads of education, research, and innovation at the service of society and the economy. They play a crucial role in realising the European Education Area (EEA) and the European Research Area (ERA) in synergy with the European Higher Education Area. By fostering strong partnerships in the EU and globally and leveraging the cumulative advantage of education systems and research networks, they are key actors in promoting the European model in line with EU interests and values: the rule of law, human rights, and international norms and standards (EC, 2022a, 2022b). Diversity, inclusion, and equity in higher education are more important than ever. Students, academics, administrators, and researchers from disadvantaged backgrounds are still underrepresented in higher education. A gender gap persists in some areas of study, research, and decision-making positions in higher education.

The gender balance decreases significantly with increasing seniority in the management of higher education institutions. In European Union (EU27) countries, only 24% of these positions are held by women. Achieving the EEA by 2025 means creating a European learning space that benefits all learners, academics, and other education personnel who can move freely within the EU to study and work. European higher education institutions must be able to work closely and intensively together to achieve this. The further realisation of the European Research Area requires strengthening the mobility of researchers and the flow of knowledge, incentivising investment in research and innovation, and enhancing transnational collaboration between universities, businesses, and other research and innovation actors in their ecosystems. Transnational cooperation will strengthen the integration, excellence, diversity, attractiveness, and global competitiveness of European higher education. It will contribute to equal opportunities and non-discrimination, addressing European challenges related to climate change, digital transformation, and ageing populations, equipping learners with relevant skills and knowledge, and building resilience and supporting recovery. It will strengthen the role of higher education institutions on the

global stage and help Europe address global challenges effectively and efficiently. The transnational collaboration will create a global source of inspiration for students, academics and researchers.

In times of crisis, profound questions arise. For many people, it is important to be alive, to feel connected, to feel that we matter and that our lives have meaning. We share an innate longing for justice, dignity, compassion, and love. Education and training, like all other sectors, must take action to respond to the climate crisis. Learners of all ages must have the opportunity to develop the knowledge, skills, and attitudes to live more sustainably, adopt healthier lifestyles, and contribute-both individually and collectively-to the green transition. Acquiring sustainability skills can help children, youth, and adults understand the challenges related to climate change and the environment, rethink their behaviour, and work toward a sustainable future.

The European Competence Framework for Sustainability (GreenComp) can be used in education and training programmes and activities in formal, non-formal and informal settings. The framework defines four groups of competencies that learners of all ages should acquire in the context of sustainability. Each competency has three strands (Environment EC, 2022a, 2002b, 2002c, n-p.):

- Embodying sustainability values: Valuing sustainability, supporting fairness, encouraging nature.
- Acknowledging the complexity of sustainability: Systems thinking, critical thinking, problem-solving.
- Acting for sustainability political action: Collective action and self-initiative.
- Imagining a sustainable future: Future literacy, adaptability, and exploratory thinking.

2.5 Discussion and Conclusion

This conceptual chapter examined OER as a catalyst for social justice and equity. The focus is on quality education for all and education as a human right and a means to promote social justice. The chapter draws on global initiatives for sustainability, particularly the SDGs. The 2030 Agenda focuses on five critical dimensions: People, Prosperity, Planet, Partnership, and Peace, which is also known as the 5Ps framework. The chapter focused on the UNESCO OER recommendation and its implementation, monitoring and evaluation. In addition, the chapter addressed recent initiatives from UNESCO, such as the Futures of Education and the Transformation of Education to Achieve the SDGs, as well as the Lifelong Learning Initiative. European perspectives on the future of education were also discussed in this chapter.

To meet the demands of global challenges, there is an urgent need for a radical transformation of education in all forms, at all levels, and in all subjects, as well as in terms of openness of all educational means, innovations, methods, and formats. There is an urgent call for a so-called new or next normal, but this normal is not only a universe but also a “pluriverse.” There is also a need for a new quality agenda.

Open education, OER, and other parallel open movements such as open science, open innovation, next-generation empowerment, open communication, open partnership, and open ecosystem will be catalysts for systemic change toward a new social contract and knowledge-based action to transform education for global sustainability.

The new normal raises the question of what is considered normal. What is considered normal in one context may not be considered normal in other contexts. What is normal? Who has the power to define what is normal or the next or best normal? Similar to the concept of quality, it is in the eye of the beholder. A new quality agenda for education goes beyond quality and focuses on values, culture, well-being, and what really matters to individuals and society, as well as addressing global challenges. This can be achieved through the five critical dimensions at the core of the 2030 Agenda: People, Prosperity, Planet, Partnership and Peace, also known as the 5P framework.

A new quality agenda is based on a new social contract in the educational landscape that must consider plurality, equity, and diversity in all contexts and time periods. Therefore, it is important to renew the “why”, the “what”, the “who”, the “when”, and the “what” as well as the “how” in order to reshape our future together.

This chapter also addressed how to fulfil the promise of resilient, sustainable, and high-quality open education in the new normal and the next normal after COVID -19. Leadership is critical to change and transformation because it begins with culture. Courage and creativity are needed to challenge old patterns, systems, and paradigms. It is important to be a values-based leader who can activate people’s agency and potential to develop transformative solutions. Resilient leaders must strengthen the socio-ethical dimensions and well-being of learners. To secure the future of education, the SDGs, OECD and European Commission initiatives must be central.

The UNESCO recommendation on OER and Open Science have clear implications for the core values of openness regarding equity, justice, the new social contract, human rights, and social justice. Some points are obvious: the educational landscape must become open and flexible in every way, and given global challenges, online education is the way forward. The ecosystem is critical. It is also clear that universities, the labour market, and business—the triple helix—must work together. Because education is relevant, society should drive curricula and work with high-quality open resources and open science. Because their narratives have an impact, individuals matter more than previously thought. Therefore, the futures of sustainability lies in design, problem-solving, changing cultures and systems, and adhering to collective values. It is important to use common, powerful language to change disempowering conversations and narratives and to build a network of deep, values-based partnerships to achieve desired outcomes. It is also important to implement solutions in ways that create and support new patterns to ensure a thriving future.

The ecosystem of openness and the need for systemic change were also discussed in this chapter. Such an ecosystem includes openness to people, places, networks, ideas, things, materials, innovations, and practices. To integrate, implement, monitor, and evaluate an ecosystem of openness, 21st-century pedagogical approaches are needed, such as open pedagogy, which has been practised for some time and in which students are creators of information rather than consumers. Online teaching

and learning, cooperative learning, collaborative learning, problem-based learning, project-based learning, peer-to-peer learning, inquiry-based learning, and team-based learning are also examples of innovative, reform-oriented, student-centred pedagogies. To fully translate UDL into quality and learner engagement, open pedagogical approaches are needed, such as rhizome learning and seamless learning, as well as empathetic and socioemotional pedagogical approaches.

Education and lifelong learning are essential components of everyday urban life so that urban communities can create sustainable and harmonious societies that embody the principles of resilience, social justice, environmental sustainability, economic productivity, political participation, and cultural diversity. In many education systems, education for sustainability (EfS) (UNESCO, 2009) is considered an integrative approach to environmental education, where social and economic dimensions complement the ecological dimension of environmental education. EfS develops the knowledge, skills, values, and worldviews people need to contribute to more sustainable lifestyles. It empowers individuals and communities to think about how they interpret and interact with the world. Education for sustainable development empowers learners to make informed choices and act responsibly to ensure environmental integrity, economic viability, and just society for present and future generations while respecting cultural diversity.

Technology combined with political, economic, cultural, and humanistic spheres has paved the way for the fourth industrial revolution, which is in line with the SDGs, learning in the digital age, and the future of education. The recommendation OER also notes that there are multiple dimensions and perspectives, such as the political, existential, economic, cultural, legal, technical, social, and didactic. This complexity highlights the need for a holistic ecosystem that provides a framework for implementing a culture of change related to social justice and human rights, including open education and OER.

In times of crisis, most people need to feel alive and connected, and that they matter and that their lives have meaning. People share an innate longing for justice, dignity, compassion, and love. People's relationships to concepts and ideas and the stories they tell are important, especially in the context of open education. However, we must recognise that entangled quantum systems are never completely separable. We need to be aware of the intertwined relationships, how to respond to them, and that we are creating and recognising a shared potential to create alternatives. Value concepts are woven into the patterns that structure our relationships with each other and our environment. Therefore, the quality of our relationships creates new patterns and possibilities. Change that promotes a just and prosperous world is not achieved through wishful thinking and hope. Action and influence are essential to achieve the desired results and manifest the quality and depth of change needed in times of crisis. Not only action but also the quality of action is important to achieve transformative change. Action is a complex phenomenon, and the results of intentions and actions affect us all, whether we are aware of it or not. Actions based on universal values represent a shift from "us vs them" to "me/us," which is critical for changing cultures and systems. When we embody universal values such as justice and integrity, we

experience that we are connected. This is the foundation for creating a just and sustainable world.

Transformative perspectives include diversity, flexibility, innovation, risk, value, engagement, outreach, accountability, flexibility by any means, relevance, trust, education, retraining, de-democratisation, culture, collaboration, socialisation, and well-being. This paradigm shift leads not only to new values but also to tensions and dilemmas. Open education to ensure the human right to social justice should be part of the new social contract for education. Learning should be social, pervasive, seamless, and rhizomatic. The ecosystem of openness must leverage OER as part of the infrastructure for health and well-being.

In summary, if we are to take knowledge-based action for global sustainability, we must create and lead change. Moreover, we must create effects to change cultures and systems to achieve truly sustainable change for the future of human rights and social justice. The openness agenda cannot address quality without addressing equity, human rights and social justice.

References

- Blessinger, P., & Bliss, T. J. (Eds). (2018). *Open Education: International Perspectives in Higher Education*. Open Book Publisher.
- Cape Town Open Education Declaration, 10th Anniversary. Ten directions to move open education forward. (2017). <https://www.capetowndeclaration.org/cpt10/#about>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches*. Fifth edition. Los Angeles, SAGE. Chicago.
- European Commission. (2021a). A European approach to micro-credentials. <https://education.ec.europa.eu/levels/higher-education/european-approach-to-micro-credentials>
- European Commission. (2021b). Commission takes action to improve lifelong learning and employability. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_6476
- European Commission. (2022a). A European strategy for universities. <https://education.ec.europa.eu/document/commission-communication-on-a-european-strategy-for-universities>
- European Commission. (2022b). Proposal for a council recommendation on building bridges for effective European higher education cooperation. <https://education.ec.europa.eu/document/proposal-for-a-council-recommendation-on-building-bridges-for-effective-european-higher-education-cooperation>
- European Commission. (2022c). Learning for environmental sustainability. <https://education.ec.europa.eu/focus-topics/green/education-for-environmental-sustainability>
- Inamorato Dos Santos, A., Punie, Y., & Castaño Muñoz, J. (2016). Opening up education: A support framework for higher education institutions. EUR 27938: Publications Office of the European Union; JRC101436
- Kezar, A. (2014). Higher education change and social networks: A review of research. *The Journal of Higher Education*, 85(1), 91–125. <https://doi.org/10.1080/00221546.2014.11777320>
- O'Brien, K. (2022). *You matter more than you think: Quantum social change for a thriving world*. Change Press.
- Open UNBC. (2021). OER accessibility toolkit. University of British Columbia. https://open.ubc.ca/oer-accessibility-toolkit/#cite_note-2

- Ossiannilsson, E. (2018). Ecologies of openness: Reformation through open pedagogy. *Asian Journal of Distance Education*, 13(2), 103–119. http://www.asianjde.org/2018v13.2.Ossiannilsson.pdf?fbclid=IwAR2bxQrPcQOchJih7CTdLrkAYn8ys_pvc-3b5UMyBORm-ycOcAu5Sq_G4p7M.
- Ossiannilsson, E. (2020). Quality Models for Open, Flexible, and Online Learning. *Journal of Computer Science Research*, 2(4).
- Ossiannilsson, E. (2021a). Some challenges for universities, in a post crisis, as COVID-19. In D. Burgos, A. Tlili, & A. Tabacco (Eds.), *Radical solutions for education in a crisis context* (pp. 99–114). Springer.
- Ossiannilsson, E. (2021b). Toward a quality framework for open educational resources (OER): Application of the TIPS and Kahn’s quality frameworks. In B. Khan, S. Affouneh, S. Salha, & Z. Khlaif (Eds.), *Challenges and opportunities for the global implementation of e-learning frameworks* (pp. 35–51). IGI Global.
- Ossiannilsson, E. (2021c). Quality models for open, flexible, and online learning. *Journal of Computer Science Research*. <https://ojs.bilpublishing.com/index.php/jcsr/article/view/2357>
- Ossiannilsson, E. (2021d). Human rights and social justice through open educational resources and lifelong learning. *Macro Management & Public Policies* 3(1). <https://ojs.bilpublishing.com/index.php/mmpp/article/view/2925>
- Ossiannilsson, E. (in press). OER: Open to ideas, open to the world. Manuscript in preparation.
- UNESCO. (2009). Policy guidelines on inclusion in education. <https://unesdoc.unesco.org/ark:/48223/pf0000177849>.
- UNESCO. (2015). Rethinking Education Towards a global common good? <https://unevoc.unesco.org/eforum/RethinkingEducation.pdf>.
- 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
- UNESCO. (2021a). Open educational resources. <https://en.unesco.org/themes/building-knowledge-dge-societies/oer/recommendation>
- UNESCO. (2021b) OER dynamic coalition. <https://en.unesco.org/themes/building-knowledge-societies/oer/dynamic-coalition>
- UNESCO. (2019). Recommendation on open educational resources (OER). http://portal.unesco.org/en/ev.php-URL_ID=49556&URL_DO=DO_TOPIC&URL_SECTION=201.html
- UNESCO. (2022). Transforming Education Summit. <https://en.unesco.org/futuresofeducation/transformingeducation-summit>.
- United Nations. (n.d.). The 17th goal. <https://sdgs.un.org/goals>
- United Nations. (n.d.). Universal declaration of human rights. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>
- Weller, M. (2010). Big and little OER. In *Open Ed 2010 Proceedings*. Barcelona: UOC, OU, BYU. <http://hdl.handle.net/10609/4851>
- Wikipedia. (n.d.). Universal design. https://en.wikipedia.org/wiki/Universal_design
- Wiley, D. (2014). Clarifying the 5th R [Blog post]. Iterating Toward Openness. Retrieved from <https://opencontent.org/blog/archives/3251>.

Professor Dr. Ebba Ossiannilsson from Sweden is an independent researcher, expert, consultant, quality auditor, and influencer in the fields of open, flexible online, and distance learning (OFDL) and the “new normal”. Her focus is on quality, innovation, leadership, and personalised learning. She works primarily at the strategic and policy levels, both nationally and internationally, and with key national and international organisations. She is committed to promoting and improving OFDL in the context of SDG4 and the futures of education. Ossiannilsson has more than 20 years of experience in her field. She is a member of the ICDE Board. Ossiannilsson is a quality expert and reviewer for ICDE, EDEN, and the EADTU. Ossiannilsson chairs the ICDE OER Advocacy Committee and is a member of the ICDE Quality Network. She is regularly invited as a keynote

speaker at conferences. She is a guest editor for several special journal issues and a member of the editorial board of several scientific journals. She has published more than 200 articles and has been awarded the following fellowships: EDEN Fellows, EDEN Council of Fellows, and Open Education Europe. She is an ICDE OER Ambassador, Open Education Europe Ambassador, Champion of SPARC Europe, and the Open Education Global Excellence Award for Open Leadership.