

Article

Resilient Agile Education for Lifelong Learning Post-Pandemic to Meet the United Nations Sustainability Goals

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Abstract: The World Health Organization officially classified COVID-19 as a pandemic in early March 2020. Extraordinary security measures, health restrictions, and social isolation left hardly any aspect of daily life untouched. One area that underwent major changes was education, whose cornerstones and foundations were challenged as schools and universities around the world were forced to close their doors to prevent the spread of the virus. In this article, the reasons resilience and agility are critical to achieving social justice, human rights, and the United Nations Sustainability goals (SDG) in the post-pandemic era are studied. It is also argued that the role of education needs to be redesigned to be resilient and agile and to ensure lifelong learning. In addition, a post-pandemic quality agenda is the focus of the article. Some of the emerging quality dimensions are empathy, satisfaction, well-being, the social dimensions of learning, and their impact at the nano, micro, meso, and macro levels. This article was prepared as part of a systematic literature review based mainly on official reports from organizations working in this field worldwide. The author selected examples from ongoing discourse and debate about the challenges in this field in addition to examples from the author's research, experiences, and perspectives. In summary, questions regarding educational landscapes may be the same, but in the context of post-pandemic and resilient agile education for lifelong learning to meet the SDGs and the new social contract for education, the answers to the questions of why, who, when, what, and at what levels will be different. It is time not just to talk, but to act. Each of us can and must commit to the new social contract. It is time to collectively reimagine our futures to include the ecosystem of education in all learning environments, i.e., formal, non-formal, and informal, and to value resilient, agile, seamless, and rhizomatic learning in the context of lifelong learning.

Keywords: education; lifelong learning; post-pandemic; resilience; social contract; sustainability goals



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1. Introduction

The World Health Organization (WHO) officially classified COVID-19 as a pandemic in early March 2020 [1]. Extraordinary security measures, health restrictions, and social isolation left hardly any aspect of daily life untouched.

One area that changed greatly was education, whose cornerstones and foundations were challenged as schools and universities around the world were forced to close their doors to prevent the spread of the virus. Colleges and universities were faced with the decision of how to maintain teaching and learning while protecting their faculty, staff, and students from the rapidly evolving and unknown health threat. Many institutions opted to cancel all face-to-face classes, including internships and other learning experiences, and instruct faculty to move their courses online to prevent the spread of COVID-19 [2]. Online learning became an urgent necessity rather than an option. The rapid development of online and blended learning approaches necessitated by school and campus closures presented many challenges to learners, educators, and educational managers. Overnight, alternative methods, pedagogies, and technologies had to be introduced. On a positive

note, however, the culture of sharing became a necessity. Colleges and universities that struggled to maintain classes during the COVID-19 pandemic should have been aware, when evaluating these emergency distance learning experiences, that emergency remote distance learning and teaching (ERT) is a temporary change that is completely different from well-planned online learning in terms of methods, values, theory, and practice. Well-planned online learning experiences are very different from courses offered online in response to a crisis or disaster [2].

In this catastrophic situation, the issues included resilience and the role of post-pandemic education in meeting and adapting to the sustainability goals of the United Nations Educational, Scientific, and Cultural Organization's (UNESCO) Education for All Agenda and the role of lifelong learning [3–5]. A global movement has been launched to challenge the mission and goals of education, and hope, opportunity, collaboration, and action are also rapidly increasing around the world. Across the globe, questions were raised about the possibility of returning to pre-pandemic education standards; however, education resembling that before 2020 was not an option. Instead, a movement emerged for the next normal, which was seen as the best new normal [6–9]. However, further questions arose regarding the definition of “normal,” including for whom, when, and how.

The focus of this article is the reasons why, in the post-pandemic era, resilience and agility are critical to achieving social justice, human rights, and the SDGs. The case is also made that the role of education, at least higher education, must be reshaped to be relevant, resilient, and agile to ensure lifelong learning. In addition, a post-pandemic quality agenda is discussed. Some emerging dimensions of quality are empathy, satisfaction, well-being, the social dimensions of learning, and their implications at the nano, micro, meso, and macro levels.

2. Methods

The study approach presented in this article is based on a literature review [10,11]. This article was prepared as part of a semi-systematic literature review, and close to an integrative review based mainly on official reports from leading international organizations active in this field worldwide. The research questions addressed in this study concerned the changing educational landscapes and the future of education in the context of post-pandemic and resilient agile education for lifelong learning to meet the SDGs and the new social contract for education. Questions were also addressed about the emerging ecosystem of education, lessons learned post-pandemic, and the need for resilience. The author selected examples from ongoing discourse and debate about challenges in the fields, as well as from the author's research, experiences, and perspectives over a period of more than 20 years. Previous research was conducted to determine the current state of knowledge based on previous experience, including shortcomings and gaps [10,11]. The process was based on the four phases of a literature review; designing the review, conducting the review, analyses, and writing the review [11].

3. Results

The following subsections discuss examples of agile, seamless, and resilient education in the context of lifelong learning to achieve the SDGs.

3.1. Responses to the Pandemic and Future Crises

The outbreak of COVID-19 had an immediate global impact within a very short time, affecting all social and economic sectors, such as health, finance, and education: the global crisis became a fact [1]. The public health crisis also impacted the core mission of UNESCO [12]. The COVID-19 pandemic taught us that scientific collaboration is key to solving global public health problems. It has also shown the need to provide continuous education when children around the world cannot go to school because they are confined at home. The crisis has brought home to us the importance of quality education and the well-being of all people, not only in terms of subject matter and content, but also in

terms of the ethical and social–emotional dimension of learning and education. It has taught us the power of culture and knowledge to empower people and build solidarity at a time when many people have had to maintain social distance and stay at home. Ryder of the International Labor Organization (ILO) stressed that the pandemic had highlighted how health, social and economic policies, finance, trade, and intellectual property were inextricably linked. It was therefore more important than ever to achieve better coherence in the multilateral system in the long term, and the time was ripe to do so [13]. UNESCO is more committed than ever to supporting governments around the world in the areas of distance education, open science, knowledge, and cultural exchange as a fundamental means of working together and strengthening the common bonds of humanity [12].

The pandemic COVID-19 has forever changed education and its future, as well as the labor market. It has also affected attitudes, behaviors, performance, and lifestyles. Schwab already predicted in 2016 at the World Economic Forum [14] that the Fourth Industrial Revolution (4IR) through digital and technological transformation will forever change our lives in ways we cannot predict; it will change the way we live, work, collaborate, communicate, perform, maintain relationships, and even the way we learn. The changes brought by the 4IR were accelerated and rapidly amplified by the scale and pace of the COVID-19 pandemic. It has been said that in crises we have the ability to change and reorient ourselves faster than usual.

When the COVID-19 pandemic broke out worldwide in March 2020, colleges and universities were faced with the question of how to maintain teaching and learning operations while protecting their faculty, staff, and students from the rapidly evolving but not yet well-understood health emergency. The magnitude of the dramatic shift to distance learning and emergency learning has forever changed the educational landscape and will continue to do so, as its foundations have been challenged. However, according to Hodges, Moore, Locke, Trust, and Bond [2], it is important to remember that online courses and degree programs offered in response to a crisis, as is the case with emergency remote distance education and learning, are very different from well-designed, high-quality online and distance learning programs. Nonetheless, distance education and online learning have fundamentally changed the future of higher education. Online learning will persist and evolve to be resilient, flexible, relevant, and sustainable. Education in the post-pandemic world is very different than it was a few decades ago. Andreas Schleicher Director of OECD Education and Skills emphasized that it is critical to provide more and better evidence of the effectiveness of distance learning, especially in the most challenging contexts, and to support the development of digital learning strategies [15–17].

We have learned many lessons from this so-called emergency distance education and learning, one of the largest experiments in the history of distance learning, including that we must embrace change and apply our new insights into the benefits of blended learning to promote a more equitable future for all people worldwide, especially in education.

According to the OECD [15,16], universities faced significant challenges during the pandemic. Some of the most obvious included finding a sustainable balance between environmental, economic, demographic, and social concerns and digital transformation and (geo)political uncertainty. As we are at a turning point and a time of change in both society and universities, it is important to step back and think strategically about the future. How do we envision the role of universities in 10 years? What role should they play in society, and how should their missions evolve? What fundamental values and conditions do we need to maintain?

Ryder of the International Labor Organization (ILO) emphasized that the “catastrophic” impact of the COVID-19 pandemic on the world of work has underscored the need for people-centered economic policies. These impacts have also underscored the need for people-centered economic policies [15–17]. Across the globe, questions are being asked about the future of students in an age dominated by the internet and technological innovation. Ryder also pointed to the consequences of the multiple and growing inequalities in our societies brought to light by the pandemic and the failure to address them. Moreover,

the human suffering caused by the pandemic was exacerbated by this collective failure. In the name of social justice, the consequences, even more than usual, must be borne by all stakeholders at all levels. Ryder praised the efforts and commitment of governments to do all they can to overcome the health crisis and mitigate its social and economic consequences. He emphasized that people around the world hope for and aspire to a recovery that will lead to a resilient, sustainable, more equitable, and better future. He also stressed the need for a very specific “roadmap” for building a people-centered recovery from the crisis of COVID-19.

3.2. *Unesco Initiatives*

The UNESCO SDG4 emphasizes that quality education for all is related to social justice, equity, and human rights. Education is at the heart of UNESCO’s mission. As is well-known, education has its own SDG dedicated to it: SDG4. In UNESCO SDG4, it is emphasized that quality education for all has to do with social justice, equality, and human rights. This has its basis in the United Nations Universal Declaration of Human Rights (1948) and also in many other international human rights instruments. United Nation Article 26 [18] n.p.) states the following:

1. Everyone has the right to education. Education shall be free, at least at the primary and elementary levels. Primary education shall be compulsory. Technical and vocational education shall be made generally available, and higher education shall be equally accessible to all on the basis of merit.
2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance, and friendship among all nations, racial, or religious groups and support the activities of the United Nations for the maintenance of peace.
3. Parents have the right to choose the type of education they wish for their children.

Education, especially open education, is part of the need to ensure equality, social justice, and liberation for all.

3.2.1. UNESCO’s Agenda and Sustainability Goals (SDG)

All of the 2030 Agenda goals call for education to equip people with the knowledge, skills, and values they need to live with dignity, shape their lives, and contribute to their societies [4]. SDG 4 on education aims to ensure inclusive and equitable quality education by 2030 and promote lifelong learning opportunities for all. It requires political will, global and regional collaboration, and commitment from all governments, civil society, the private sector, and other multilateral organizations to address education challenges and build systems that are inclusive, equitable, and relevant for all learners. Education is a human right and a force for sustainable development and peace. According to [4,19] open education is likely the only means to achieve this goal.

3.2.2. UNESCO’s Futures of Education and Learning to Become

In 2019, the UNESCO International Commission on the Futures of Education launched its global initiative Futures of Education: Learning to Become to rethink how knowledge and learning can shape the future of humanity and the planet [18,19]. This initiative, which involves broad public and professional engagement, aims to stimulate a global debate about how knowledge, education, and learning can be reconceptualized in an increasingly complex, uncertain, and precarious world.

Although the initiative was driven by an awareness that uncertainty, complexity, and fragility were rapidly increasing worldwide, it could not have foreseen that a global health pandemic would occur within a few months, reminding us that dramatic changes can occur suddenly and unexpectedly. After a two-year global consultation, research engagement, and co-construction process consultation and with the participation of many stakeholders at all levels, they issued their report and recommendations, titled *Reimagining our futures*

together: a new social contract for education. In it, they ask what role education can play in shaping our shared world and our shared future as we look toward 2050 and beyond.

The COVID-19 pandemic revealed many weaknesses and vulnerabilities, including rising inequality, risks associated with privatization of education, and lack of preparation for the massive shift to digital media and distance learning. However, some positive aspects were also increasingly visible in the society. It is evident that the answer to the challenges many societies face involves solidarity and strong resilience. Attention to the common good, well-being, empathy, ethics, and social–emotional dimensions of education has increased. So has the ingenuity, commitment, innovation, and creativity of the many teachers, families, and students who have created remarkable learning experiences. The COVID-19 pandemic has threatened public education and increased the risk of fragmentation and disintegration. There has been a massive shift in learning and teaching away from traditional environments based on physical interaction. The multiple roles that school play in addition to academic learning have become obvious and evident, such as child and adolescent well-being, health, and nutrition. This increased awareness and appreciation could serve as the foundation for a new path in public education and pave the way for a new social contract.

3.2.3. UNESCO: Lifelong Learning—A Key Competence

Around the world, millions of people, even in the richest economies, face financial and other barriers that exclude them from learning and prevent them from reaching their potential. The complexity and multidimensionality of these challenges requires the implementation of a holistic vision of lifelong learning. Lifelong learning is therefore critical to achieving education for all and realizing the SDGs of UNESCO, particularly SDG 4 on education and SDG 3 on good health and well-being. During the pandemic, it became clear that education is an essential component of well-being and social–emotional health. The UNESCO Lifelong Learning Initiative [20] highlights the urgent need to rethink lifelong learning beyond the conceptual boundaries of education and to reconnect learning to larger societal domains. This initiative aims to enrich the future of education by promoting new perspectives on key areas such as the role of institutions, the use of technology, and the sources of knowledge. The initiative is based on the argument that creating a global culture of lifelong learning is key to addressing the challenges facing humanity, such as the climate crisis, technological and demographic change, and the challenges posed by the COVID-19 pandemic and the inequalities it exacerbates.

The UNESCO International Commission on the Futures of Education argues that creating a global culture of lifelong learning will be key to addressing the challenges facing humanity, from the climate crisis and technological and demographic change to the challenges posed by the COVID-19 pandemic and the inequalities it exacerbates. A new report from the UNESCO Institute for Lifelong Learning (UIL), *Embracing a culture of lifelong learning*, lays out a forward-looking vision of education and calls for a fundamental shift toward a culture of lifelong learning by 2050 [20]. The report addresses the potential contribution of lifelong learning to transforming education and creating a more sustainable, healthy, and inclusive future, and presents a compelling vision for lifelong learning and the values and principles that must underpin it. UNESCO calls on the international community to view education as something that has both public and private value, and to recognize lifelong learning as a new human right. It further states that lifelong learning should be considered throughout life, from cradle to grave. Lifelong learning begins in childhood and not after formal education, as it is too often interpreted.

Looking ahead, UNESCO's report articulates 10 key messages, all of which are critical to creating a culture of lifelong learning: (i) recognize the holistic nature of lifelong learning, (ii) promote transdisciplinary research and cross-sectoral collaboration for lifelong learning, (iii) place vulnerable groups at the center of the lifelong learning agenda, (iv) establish lifelong learning as a common good, (v) ensure better and equitable access to learning technologies, (vi) transform schools and universities into lifelong learning institutions, (vii) recognize and promote the collective dimension of learning, (viii) promote and support

local lifelong learning initiatives, including learning cities, (ix) transform and revitalize workplace learning, and (x) recognize lifelong learning as a human right.

Achieving this vision of lifelong learning requires a learner-centered, demand-driven approach to education that enables learners of all ages and backgrounds to actively shape and apply the learning process and its outcomes to reach their full potential. In addition, learning must be a collective process that recognizes the value of peer and intergenerational learning. This social dimension emphasizes learning to care for each other, for diverse communities, and for the planet. A collectively built global learning ecosystem should seamlessly integrate formal, non-formal, and informal learning, as well as different learning modalities, both online and offline. Such an ecosystem would enable planned or spontaneous, individual, or collective learning across the life course. It relies on the free availability of open educational resources and open technologies, while strengthening learning opportunities through transformed educational institutions, redesigned (public) learning spaces, and the revitalization of workplace learning. Legal foundations and mechanisms that recognize lifelong learning as a human right must therefore ensure the recognition, validation, and accreditation of learning outcomes in different contexts and the democratization of the negotiation of individual and societal learning needs [20].

3.2.4. OECD

The OECD [16,17], similar to many other major global organizations, has emphasized that lifelong learning is key to the success of labor markets and societies shaped by megatrends such as increasing life expectancy, rapid technological change, globalization, migration, environmental changes, and digitization, as well as sudden shocks such as the COVID-19 pandemic. Government support remains valuable to ensure that major structural changes do not cause deep rifts in the social fabric and to create a culture of lifelong learning that empowers individuals to manage change. Thus, insights are needed on how best to support lifelong learning so that individuals “learn how to learn.” Learning to learn is accordingly a key skill. The OECD Skills Outlook [16,17] examines how policies, particularly those that regulate the development and use of skills, can best support lifelong learning for all. The report uses comparative quantitative data to highlight the key role that socio-emotional and motivational factors play in successful participation in lifelong learning. While these factors are critical to the sustainability of lifelong learning in general, the pandemic has increased their importance. In addition, the OECD is currently working on its Compass and Education to 2030 [15] in which well-being is one of the most important dimensions. The OECD also emphasized the emergence of new skills needed to adapt to the changing demands of the labor market and the urgent need to address all areas of lifelong learning.

3.2.5. European Lifelong Learning Platform and the European Universities Association

In 2017, the Lifelong Learning Platform (LLLP) in Europe published its annual position paper on reshaping education in the digital age, which is a comprehensive statement on education, training, and its stakeholders on the key issues and opportunities in lifelong learning. In 2021, when the Digital Action Plan EC 2021–2027 was launched, LLLP supported and promoted the messages of the Action Plan and updated them based on the actions taken in response to the COVID-19 pandemic [21].

Learning to learn is thus a prerequisite for acquiring and improving skills, knowledge, and attitudes and a key competence of lifelong learning. It is crucial for active global citizenship, for participation in the development of democracy, and for personal development to orchestrate and direct one’s own learning.

Learning competencies, i.e., skills, knowledge, and attitudes, promote the ability to absorb learning content and organize learning individually or collectively, and to make the best use of time, information, and learning opportunities. This includes the ability to set goals, identify the means and obstacles to achieving those goals according to an individual learning strategy, and effectively monitor and evaluate one’s own learning

process. Learning to learn includes the ability to acquire, process, and assimilate new knowledge, skills, and orientations. Learning to learn means that learners can build on prior learning and life experiences to apply knowledge and skills in a variety of contexts: personal, professional, and social. Identifying opportunities to increase one's motivation and confidence is critical to learning to learn. Learning to learn empowers learners to facilitate learning in their educational work and to develop positive attitudes toward lifelong learning.

The European Universities Association (EUA) endorses the concept of universities without walls, a vision for 2030 for education that provides inspiration and guidance to higher education leaders and academic communities [22]. It calls for strengthening the role of universities in society, with sustainability as an integral part of their missions in learning and teaching, research, innovation, and culture, treating culture as a new area. Central to this vision are openness and engagement based on the core academic values of respect for knowledge and facts, critical thinking and open debate, academic rigor, integrity, and ethics, with academic freedom and institutional autonomy being essential. The EUA argues that new responses to health and well-being issues, as well as new business models, paradigms, and pedagogical approaches are needed. The EUA emphasizes that the education of the future must be (i) open, transformative, and transnational; (ii) sustainable, diverse, and engaged; and (iii) strong, autonomous, and accountable. Moreover, there is a need to emphasize the three usual roles and tasks of higher education, namely (i) learning and teaching, (ii) research, and (iii) innovation, in addition to the new and perhaps most important global task of (iv) cultivating, nurturing, and promoting culture.

The EUA emphasized three factors for successful change: (i) an enabling environment, (ii) adequate investment, and (iii) strong leadership. Priorities for action should be (i) reforming academic careers, (ii) promoting interdisciplinarity, and (iii) strengthening civic engagement.

3.3. Resilience

Resilience is generally defined as the ability of a dynamic system to successfully adapt to challenges that threaten the system's function, survival, or future development [23]. In short, resilience is about the ability to survive a crisis and thrive in a world of uncertainty. This requires indicators such as leadership, culture and courage, a willingness to change, and trusted and relevant networks and relationships.

3.3.1. Resilient Organizations and Resilient Leadership

To achieve the SDGs in a rapidly and constantly changing environment and context, both globally and immediately, resilient organizations and resilient leadership are important. Resilient companies and organizations recover and thrive after disruption because they withstand its effects through good risk management. They are also adaptive, resilient, and sustainable in the face of disruption. Response, recovery, and contingency are the foundations of resilience. Key characteristics of a resilient organization include preparedness, adaptability, collaboration, trustworthiness, and accountability. All five of these characteristics increase an organization's resilience. However, it is critical that all five characteristics are fostered through an ecosystem and with a holistic approach. Organizational resilience requires anticipating and acknowledging reality, making a personal commitment, communicating by all means and at all levels, and using narratives of resilience that both affirm the organization and help employees continue to find meaning in their work. At least five steps are critical: (i) pay attention to the environment, (ii) respond productively to constant change, (iii) be prepared for adversity, (iv) respond proactively and flexibly to crisis and disruption, (v) adapt positively, and (vi) learn from experiences to achieve higher levels of performance over the long term. In addition, the following factors are critical: the organization values reliability, acknowledges complexity, values strong leadership, acknowledges risk, and decentralizes decision making. According to [24] n.p.), seven categories can be distinguished:

- Strategy: defining the path and goal of transformation.
- Growth: driving customer centricity, product innovation, and market/revenue growth.
- Operations: transforming and modernizing operations.
- Technology: accelerating digital transformation.
- Labor: transforming work, the workforce, and the workplace.
- Capital: optimizing working capital, capital structure, and business portfolios.
- Society: managing environmental and social resources through trust, response, governance, and measurement.

Each element must be strong. Taken together, the seven elements form an interconnected, interdependent ecosystem that strengthens each part and improves the adaptability of the organization.

Renjen [24] further argued that leaders of resilient organizations: (i) think ahead, think globally, network locally, and engage stakeholders in three-event horizon work and scenario development; (ii) lead inward; (iii) lead across sector and jurisdictional boundaries, differentiating the work of the organization from that of others and finding ways to foster collaboration, cooperation, and partnership; and (iv) acknowledge change by celebrating successes and reinforcing the idea that the future does not emerge directly from the past. Resilient leaders maintain their energy level under pressure, deal with disruptive change, and adapt. Resilience is critical to a culture of change. Resilient leaders know that an agile response to disruption is about more than survival. Today's big problems require entire systems to be agile and adaptive. At its core, however, agility has a human dimension, both on an individual and cultural level. Resilient leaders build resilience by inviting the entire ecosystem to help determine the path. In other words, resilience involves collective agility and uncovering structures, values, and attitudes [24]. Resilience is a critical attribute of high-performing leaders. Renjen [24] also argues that leaders must cultivate it within themselves to advance and thrive.

3.3.2. How to Create a Resilience Ranking

Since the outbreak of the COVID-19 pandemic, the concept of resilience has been high on the educational agenda. As a result, resilience assessment frameworks have also received much attention. According to Renjen [24], such frameworks should include a set of principles or criteria and accompanying metrics, including complementary quantitative and qualitative measures. This task should not be underestimated in terms of data availability, measurement, and methodology. Renjen [24] argues that it should be emphasized that the proposed framework is complex. Therefore, the key criteria or principles of resilience could focus on the following: diversification, flexibility and innovation, relevance, risk, values, trust, value preservation, sense of community, and well-being. Existing rankings include some of these criteria, but largely using established parameters such as publications, citations, and resources, such as staff-to-student ratios.

Resilient pedagogy is also critical in the field of education and has gained interest during the pandemic. Resilient pedagogy can be defined as a course design strategy that helps ensure that instruction, methods, assignments, and assessments are as resistant to disruption as possible, regardless of the form in which a course is designed: online, face-to-face, or blended [25]. In resilient design, three main principles help create course plans that can adapt to disruption and change: Planning for Extensibility, Planning for Flexibility, and Planning for Redundancy.

In terms of pedagogy, however, both resilient pedagogy and an open approach to seamless learning are needed, meaning that students can learn in a variety of scenarios whenever they are curious and can easily and quickly move from one scenario to another in different contexts, using their personal device as a facilitator. Seamless blended learning is a holistic, agile education ecosystem that integrates face-to-face instruction, virtual learning, and a cloud-based learning management system.

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and scenarios whenever they are curious, and move easily and quickly from one scenario to another in different contexts, using their personal device as a facilitator. Seamless blended learning is a holistic, agile education ecosystem that integrates face-to-face instruction, virtual learning, and a cloud-based learning management system. A seamless learning environment bridges private and public learning spaces where learning occurs through both individual and collective efforts and across different contexts (e.g., in-school vs. out-of-school, formal vs. informal, and physical world vs. virtual reality or cyberspace) (Ossiannilsson, in press). In addition, the seamless learning approach and the rhizome approach are relevant paradigms for resilient, agile education for lifelong learning to achieve the SDGs. Rhizomatic learning is a way of thinking about learning based on ideas described by Deleuze and Guattari [26]. They used the terms “rhizome” and “rhizomatic” to describe theory and research that allow for multiple, non-hierarchical entry and exit points when representing and interpreting data. They used this image to describe the ways in which ideas are diverse, interconnected, and self-repeating. A rhizome has no beginning and no end, much like the learning process.

In addition to the resilience approach, it might be worth considering collaborative constructivism, an educational strategy that combines socio-constructivism with philosophies such as knowledge construction and connectivism [27]. In collaborative constructivism, Girvan and Savage [28] and Leask and Younie [29] argued that six core characteristics are identified: interaction with the environment, group members, and learning objects; active collaboration; engagement in knowledge construction; knowledge publication; knowledge transfer between groups; and dynamic and adaptive courses. In summary, collaborative constructivism is an approach to learning in which students construct their own knowledge (i.e., constructivism) by interacting with their environment (i.e., social constructivism) and actively engage in the process of constructing knowledge for their learning community.

One of the pioneers of distance education, Börje Holmberg [30], emphasized the emphatic approach to learning and education. The emphatic approach emphasizes the social–emotional dimensions of learning and places the personal relationships between the parties involved in the teaching and learning process at the center of distance education. Interactions, conversations, atmosphere, feelings, and trust are essential to learning and to learners taking control and responsibility for their own learning and orchestrating their learning. He also argued that it is critical to become familiar with learners early on and to consider their prior experiences, readiness to learn, expectations, goals, and motivations. Personal contact with each learner is essential. Although learning outcomes and course materials are often the primary focus, it is necessary to make personal contact at all times and in all situations in an attempt to reach potential learners. The empathetic and personal approach is in line with Holmberg’s guiding principles, as there is no single curriculum or method that is appropriate for all learners. It is therefore necessary and crucial to move from one’s comfort zone to the fear zone, to the learning zone, and to the growth zone.

4. Conclusions and Further Recommendations

The current upheaval in schooling has exacerbated educational inequalities between social and economic classes and regions. In this fast-paced digital world, education must be inclusive, ensure equitable and quality education, and promote lifelong learning opportunities for all. Despite the inconvenience caused by the COVID-19 pandemic, it has raised awareness of new opportunities to reinvigorate our education systems and reshape schooling perspectives and practices. Lessons learned from the disruptions to schooling during the pandemic should prompt educators to change their perspectives and practices. The need to isolate each learner in their own space should cause educators to rethink what they have known in the past.

In terms of the new social normal, learning, education, and curriculum, the pandemic did not create new trends, but rather accelerated existing trends that can be grouped under the term technologization. Due to the COVID-19 pandemic, the curriculum was moved online. All schools offered online-only courses, forcing us to separate ourselves physically

and, more importantly, to separate ourselves from the face-to-face encounters that a classroom can provide. Technology supports standardized testing and forces software-based conformity and constant self-assessment, while lived, embodied experience and intellectual independence disappear.

The COVID-19 pandemic has forced schools to adopt, implement, and use more features of EdTech tools. After all that teachers and students have been through during this transition, blended learning should be the new normal. We will move to blended models where distance learning and digital platforms support face-to-face instruction and minimize teacher workload [21].

Although the current quality agenda was questioned before the COVID-19 pandemic, it has become even more important and is high on the agenda of educational institutions and educational organizations [9,31–34]. Some dimensions include the following: (i) empathy and well-being; (ii) satisfaction; (iii) impact; (iv) collaboration; (v) glocalization; (vi) global challenges; (vii) relevance; (viii) labor market/economic relevance; (ix) resilience; (x) gratitude; (xi) best learning moments; (xii) resilience ranking; (xiii) fulfillment; (xiv) emotions and feelings; (xv) confidence; and (xvi) trust.

After the pandemic, there was a major change in the understanding and interpretation of space and time. There were movements toward cross-action spaces and seamless learning. A changed quality agenda is needed that focuses on the following: Satisfaction, Engagement, Impact, Contributions to Individual and Societal Development, Well-being and Health, Citizens for Today and for the Future, Innovation, Creativity, the Triple Helix Approach, Social Justice, Equity, and Lifelong Learning (i.e., the SDGs). In addition, quality is about the four Cs: creativity, courage, communication, and character. There is also an urgent need to create a culture of lifelong learning. The lifelong learning ecosystem should serve as a guiding principle.

Human resources are the most important asset, because ultimately, they are about trust, empathy, sustainability, and transparency, and education and learning are about human connections with people, for people, and by people. Another analogy is the five Hs: hands, heart, hope, health, and harmony.

In the aftermath of the pandemic, it will be critical, as UNESCO [35–37] has emphasized, that the safety, health, and social-emotional well-being of students and faculty are the most important dimensions of education. Educational institutions must address equity, justice, and inclusion as well as SDG4. In addition, feasibility and equity must be seriously considered, especially in contexts where resources and infrastructure are limited. Continuous assessments are also important and should be supported by equity risk mitigation measures. Alternatives to testing must also be considered when addressing social problems and involving learners in solving social dilemmas from the outset. Education and learning are about content, well-being, confidence, creativity, and fun [20]. Empathy and emotional intelligence are critical to leadership. In the post-pandemic era, each of us will be a leader, so be bold and be the leader you want to be.

In summary, questions regarding educational landscapes may be the same as before, but in the context of post-pandemic and resilient agile education for lifelong learning to meet the SDGs and the new social contract for education, the answers to the questions of why, who, when, what, and at what levels will be different. It is time not just to talk, but to act, and each of us can and must commit to the new social contract. It is time to collectively reimagine our futures (which is always to be understood in the plural) to include the ecosystem of education in all learning environments, i.e., formal, non-formal, and informal, and to value resilient, agile, seamless, and rhizomatic learning in the context of lifelong learning.

The lessons learned from recent international consultations, research, and recommendations from leading international organizations for the post-pandemic period require scientific, health, ethical, and social considerations for both people and the planet. This article has strongly emphasized and argued that it will be critical post-pandemic, as UNESCO (2020) has also emphasized that the safety, health, and social-emotional well-being

of students and faculty are the most important dimensions of education. Curricula and content are important, of course, but they must be relevant and at the forefront of solving tomorrow's unknown challenges. Educational institutions must address equity, justice, and inclusion, as well as SDG4 and the new social contract for education.

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References

1. WHO. (2020, March 11). In *Coronavirus Disease 2019 (COVID-19); Situation Report-51*; WHO: Geneva, Switzerland, 2020. Available online: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10 (accessed on 10 June 2022).
2. Hodges, C.; Moore, S.; Lockee, B.; Trust, T.; Bond, A. The Difference between Emergency Remote Teaching and Online Learning. EDUCAUSE. 2020. Available online: <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning> (accessed on 10 June 2022).
3. UNESCO. Leading SDG 4: Education 2030. Available online: <https://en.unesco.org/themes/education2030-sdg4> (accessed on 10 June 2022).
4. UNESCO. Futures of Education: Learning to Become. 2019. Available online: <https://en.unesco.org/futuresofeducation/> (accessed on 10 June 2022).
5. UNESCO. *Embracing a Culture of Lifelong Learning: Contribution to the Futures of Education Initiative: Report—A Transdisciplinary Expert Consultation*; UNESCO, Institute for Lifelong Learning: Paris, France, 2020. Available online: <https://unesdoc.unesco.org/ark:/48223/pf0000374112UNESCO> (accessed on 10 June 2022).
6. Bozkurt, A.; Jung, I.; Xiao, J.; Vladimirsch, V.; Schuwer, R.; Egorov, G.; Lambert, S.R.; Al-Freih, M.; Pete, J.; Olcott, D., Jr.; et al. A global outlook to the interruption of education due to COVID-19 pandemic: Navigating in a time of uncertainty and crisis. *Asian J. Distance Educ.* **2020**, *15*, 1–128.
7. Bozkurt, A.; Sharma, R. Education in normal, new normal, and next normal: Observations from the past, insights from the present and projections for the future. *Asian J. Distance Educ.* **2020**, *15*, i–x.
8. Ossiannilsson, E.; Sandström, S. Det nya Normala Handlar om Omställning och hållbarhet. The New Normal will Deal with Transformation and Sustainability. *Universitetsläraren* **2020**. Available online: <https://universitetslararen.se/2020/05/29/det-nya-normala-handlar-om-omstallning-och-hallbarhet/> (accessed on 10 June 2022).
9. Stracke, C.M.; Bozkurt, A.; Conole, G.; Nascimbeni, F.; Ossiannilsson, E.; Sharma, R.C.; Burgos, D.; Cangialosi, K.; Fox, G.; Mason, J.; et al. Open education and open science for our global society during and after the COVID-19 outbreak. In *Proceedings of the Open Education Global Conference, Nantes, France, 16–20 November 2020*; p. 4. Available online: <http://www.opening-up.education/publications> (accessed on 10 June 2022). [CrossRef]
10. Creswell, J.W.; Creswell, J.D. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*; Sage Publications: Thousand Oaks, CA, USA, 2018.
11. Snyder, H. Literature Review as a Research Methodology: An Overview and Guidelines. *J. Bus. Res.* **2019**, *104*, 333–335. Available online: <https://www.sciencedirect.com/science/article/pii/S0148296319304564> (accessed on 10 June 2022). [CrossRef]
12. UNESCO. UNESCO Post COVID 19. Available online: <https://en.unesco.org/news/education-post-covid-world-nine-ideas-public-action> (accessed on 10 June 2022).
13. International Labor Organization (ILO). COVID-19 and the World of Work. 2021. Available online: <https://www.ilo.org/global/topics/coronavirus/lang--en/index.htm> (accessed on 10 June 2022).
14. Schwab, C. *The Fourth Industrial Revolution*; World Economic Forum: Cologny, Switzerland, 2016. Available online: <https://www.weforum.org/about/the-fourth-industrial-revolution-by-klaus-schwab> (accessed on 10 June 2022).
15. OECD. The Impact of Covid-19 on Education—Insights from Education at a Glance. 2020. Available online: <https://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf> (accessed on 10 June 2022).
16. OECD. The State of Higher Education. One Year into the COVID-19 Pandemic. 2021. Available online: https://www.oecd-ilibrary.org/education/the-state-of-higher-education_83c41957-en?_ga=2.239633280.248329523.1625384020-423207501.1625147232 (accessed on 10 June 2022).
17. OECD. Learning for Life. 2021. Available online: <https://www.oecd.org/education/oecd-skills-outlook-e11c1c2d-en.htm> (accessed on 10 June 2022).
18. UN. Universal Declaration of Human Rights. 1948. Available online: <https://www.un.org/en/about-us/universal-declaration-of-human-rights> (accessed on 10 June 2022).

19. UNESCO. UNESCO OER Recommendation. 2019. Available online: <https://en.unesco.org/themes/building-knowledge-societies/oer/recommendation> (accessed on 10 June 2022).
20. UNESCO. UNESCO Lifelong Learning Initiative. 2020. Available online: <https://uil.unesco.org/unesco-institute> (accessed on 10 June 2022).
21. EC. The Futures of Higher Education. 2021. Available online: https://ec.europa.eu/info/publications/transformation-post-covid-future-european-universities_en (accessed on 10 June 2022).
22. EUA. Universities without Walls: A Vision for 2030. Available online: <https://www.eua.eu/downloads/publications/universities%20without%20walls%20%20a%20vision%20for%202030.pdf> (accessed on 10 June 2022).
23. Diana, F. Why Resilience Is Imperative in a Post Pandemic World. Perspectives. Available online: <https://www.tcs.com/perspectives/articles/why-resilience-is-imperative-in-a-post-pandemic-world> (accessed on 19 June 2022).
24. Renjen, P. *The Journey of Resilient Leadership: Building Organizational Resilience*; Forbes: Jersey City, NJ, USA, 2021. Available online: <https://www.forbes.com/sites/deloitte/2021/03/29/the-journey-of-resilient-leadership-building-organizational-resilience/> (accessed on 10 June 2022).
25. Eyler, W. *Conversation with Josh Eyler*; TopHat [Blogpost]: Toronto, ON, Canada, 2020. Available online: <https://tophat.com/blog/resilient-pedagogy-for-the-age-of-disruption-a-conversation-with-josh-eyler/> (accessed on 10 June 2022).
26. Delueze, G.; Guattari, F. *A Thousand Plateaus*; University of Minnesota Press: Minneapolis, MN, USA, 1983.
27. Holmes, B.; Tangney, B.; FitzGibbon, A.; Savage, T.; Mehan, S. Communal Constructivism: Students constructing learning for as well as with others. In Proceedings of the SITE 2001-Society for Information Technology & Teacher Education International Conference, Norfolk, VA, USA, 2001; Price, J., Willis, D., Davis, N.E., Willis, J., Eds.; AACE: Morgantown, WV, USA, 2001; Volume 2001, pp. 3114–3119. Available online: <https://www.learnlib.org/p/17346/> (accessed on 10 June 2022).
28. Girvan, C.; Savage, T. Identifying an appropriate pedagogy for virtual worlds: A Communal Constructivism case study. *Comput. Educ.* **2010**, *55*, 342–349. [CrossRef]
29. Leask, M.; Younie, S. Communal constructivist theory: Information and communications technology pedagogy and internationalisation of the curriculum. *J. Inf. Technol. Teach. Educ.* **2001**, *10*, 117–134. [CrossRef]
30. Holmberg, B. *Theory and Practice of Distance Education*; Routledge: London, UK, 1989.
31. Ossiannilsson, E. After COVID-19, some challenges for universities. In *Education in a Crisis Context: COVID-19 as an Opportunity for Global Learning*; Tlili, A., Burgos, D., Tabacco, A., Eds.; Springer LNET Series: Berlin/Heidelberg, Germany, 2020.
32. Ossiannilsson, E. Resilient sustainable education for the future of education: Emerging challenges. In *Handbook of Research on Emerging Pedagogies for the Future of Education: Trauma-Informed, Care, and Pandemic Pedagogy*; Bozkurt, A., Ed.; IGI Global: Hershey, PA, USA, 2021; pp. 16–43.
33. Ossiannilsson, E.S. From response to reimagine: Creating positive sustainable change for the futures of education. In *Narratives on Online Education*; Altinay, F., Kurt, M., Eds.; PegemAkademi: Istanbul, Turkey, 2021; pp. 61–76. [CrossRef]
34. Ossiannilsson, E. The New Normal: Post COVID-19 is about Change and Sustainability. *Near East Univ. J. Educ. Fac.* **2021**, *4*, 72–77. Available online: <https://dergipark.org.tr/tr/download/article-file/1576529> (accessed on 10 June 2022). [CrossRef]
35. UNESCO. UNESCO OER Dynamic Coalition 2020. Available online: <https://en.unesco.org/themes/building-knowledge-societies/oer/dynamic-coalition> (accessed on 10 June 2022).
36. UNESC. Reimagining our Futures Together: A New Social Contract for Education. 2021. Available online: https://books.google.se/books/about/Reimagining_Our_Futures_Together.html?id=LRZbEAAAQBAJ&source=kp_book_description&redir_esc=y (accessed on 10 June 2022).
37. UNISEF/UNESCO. A New UNESCO, UNICEF, World Bank and OECD Report Documents Education Responses to COVID-19 in 142 Countries. 2021. Available online: <https://www.unicef.org/press-releases/1-3-countries-are-not-taking-action-help-students-catch-their-learning-post-covid-19> (accessed on 10 June 2022).