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A Critical Reflection on the Importance of Education for Sustainable Development



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Abstract

The United Nations (UN) 2030 Agenda and Sustainable Development highlights the value of the Sustainable Development Goals (SDGs) in enabling societal progress. Contemporary society needs to consider sustainable development in a broader context where equity, diversity, and inclusion are integral to design of educational systems. Education can act as a disruptor that brings change to existing economic growth models misaligned with the needs and demands of modern society. As we transition to economic models that are more attuned to the needs of global society and planet, access to education, natural resources, and human talent is crucial for sustaining development, and allowing societies to continue advancing. However, it is imperative to deliberate on the necessity of adopting an alternative perspective on economic growth and its facilitation while adhering to the principles of sustainability.

Inclusive, diverse, and transdisciplinary education can help to enhance quality learning, social equity, and resilience in nations, fostering intellectual empowerment, lifelong learning values, and a cohesive society. The prominence of education and its partners, training, and awareness has been recurrently underscored in UN assemblies, illuminating its capacity to address concerns such as climate change, violations of human rights, and degradation of the environment. Conversely, minimal headway in this realm indicates enduring and formidable hurdles obstructing the progress of education. Broadening the reach of education is fundamental for supporting an improved future. Although the expansion of educational opportunities is applauded, it is insufficient if the requirements of global economies are not

considered. A thriving community requires substantial investment, and the capability of world economies to bring about change through capital investment is finite and dependent on access to scarce resources and their level of economic development. In addition, the fact that education has become an unattainable luxury good contributes to the widening gaps and distinctions between wealthier and less affluent nations. As such, there is a need to critically introspect on the role that education plays in driving sustainable development.

Keywords: Diversity, Economy, Education for Sustainable Development, Equity, Growth, Inclusion, Pedagogy

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Introduction

Education is a profound instrument that bolsters societal development and augments initiatives geared towards sustainability. Its role in nurturing sustainable and unified economies is crucial. Increased education levels pave the way for heightened productivity and economic expansion. Nevertheless, policymakers often downplay its value and subject it to consistent cuts in investment (Khan et al., 2022; UNESCO, 2021). A strong education system needs to have its focus redefined to include a greater number of the competencies and values associated with sustainability (Bianchi et al., 2022; Wiek et al., 2011). Sustainability challenges are becoming relevant globally, particularly as the world becomes more interconnected. Reading, writing, and decoding are no longer the sole skills of basic education. The term basic education has evolved to encompass a broader range of skills linked to lifelong learning. Not long ago, reading, writing, and arithmetic skills were considered essential for achieving monetary success. Still, our modern society needs societal transformation that demands additional skills that are also challenging the focus on specialised education that has become siloed and needs the integration of interdisciplinary, multidisciplinary and transdisciplinary approaches. The increased complexity and the dynamic and evolving nature of the global systems facing environmental demands pressures require a more in-depth understanding of society, the economy, and the environment, in addition to their connections (Crawford, 2022; Nguyen et al., 2019). In this paper, we aim to critically reflect on the need to reconsider the role of education in our global society and contribute to the ongoing debate on current trends and their disconnection with the world's pressing needs concerning how education can contribute to the challenges related to sustainable economic development, by exploring two relatively open research questions:

RQ1: What are the most influential roles of ESD in higher education institutions?

RQ2: How can pedagogical strategies be used to promote an environment that helps to address interconnected and complex sustainability challenges?

A literature review was conducted to examine the contribution of education in advancing sustainable development, to enable critical reflection. The discussions explore topics such as how education can support sustainability, the importance of continued investment in education, the pedagogical dimension of education for sustainable development, and women's involvement in education. The core research findings emphasise the need to facilitate equity, diversity, and inclusion as integral components in forming a sustainable future.

Higher Education to Promote Sustainable Development

Higher education institutions (HEIs) play a vital role in promoting sustainable development by driving learning and equipping graduates with the skills and knowledge needed to be responsible decision-makers. To achieve sustainable practices and policies, national and international policymakers need to engage in a collaborative process that challenges existing attitudes, behaviours, and decision-making processes. HEIs can support this process by offering advocacy, training, and research initiatives to advance sustainability. Graduates must be equipped with the competencies needed to become agents of future change for sustainable development, and this requires the integration of a more diverse curriculum that is not limited and constrained to siloed areas of expertise. The demands of the global economy require that HEIs take a more proactive approach towards educating learners to become global citizens who have an understanding of accountability to the development of the global economy. Our global society requires a variety of competencies that are not limited to the needs and demands of the business sector and the economic system. Contemporary development challenges require responsible leaders who can guide organisations towards sustainability, including adopting environmentally friendly behaviours, practices, and systems, and taking action on climate and biodiversity through greenhouse gas emissions reductions and nature-positive initiatives, and these challenges require a different approach to education (dé Rebello, 2003; Tomasella et al., 2023). The United Nations sustainability agenda is not limited to issues that pertain to the environment and as the 17 Sustainable Development Goals (SDGs) provide a roadmap that takes into consideration a very ambitious agenda. Adopting the 2030 Agenda presents an opportunity to expand education for sustainable development. SDG 4 provides a framework for inclusive, diverse and equitable education, with Target 4.7 being one of SDG 4's most ambitious pursuits.

"By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development" (United Nations General Assembly (UNGA), 2015, p.17).

However, a critical question and reflection on how SDG 4.7 can be articulated and supported is needed. The ambition to ensure that by 2030, all learners will be able to acquire the

required skills to promote and support sustainable development is entirely laudable. Yet, education for all does not seem to be a realistic goal within our current economic and political systems. We are facing significant challenges to achieve sustainable lifestyles with many countries not enjoying levels of development that support their citizens' most basic needs. In addition, the world is facing a continuous violation of human rights, accentuation of gender inequalities, rising levels of conflict and violence, racial confrontations, growing levels of antiimmigration sentiment that challenge the idea of global citizenship and the development of an appreciation for cultural diversity that are vital elements to ensure knowledge exchange and to nurture human talent (Agbedahin, 2019; Rivas et al., 2023;).

The importance of quality education in sustainable development is paramount. By quality, we refer fulfilling a broadened purpose, from one with a traditional economic focus to one that equally values citizenship and environmental stewardship. As such, governments, economic and business leaders worldwide must identify how HEIs must adapt to changing societal norms, promote inclusivity, and prioritise sustainability, which cannot be considered or viewed as mere options, and luxuries for the few as they have become necessities. Undoubtedly, HEIs must prioritise digital fluency and sustainability as they are pressing needs of modern society. They also need to consider education from a holistic dimension. They must adapt to shifting social standards, promote inclusivity, and engage in interdisciplinary and participatory pedagogies. Different approaches to teaching, learning and research activities are needed. For example, engaged research, which emphasises active involvement of stakeholders, offers a different approach to learning, and it could be considered in a broader learning framework that integrates learners, teachers and researchers, as argued by Morales et al., (2022) in their novel "*Circular Pedagogy*." The authors argued for the need to develop proactive teaching and learning environments through a circular learning and knowledge exchange process that benefits from the co-creation of knowledge. This approach benefits learners, communities, and educators by promoting collaboration in problem-framing, designing solutions, and evaluating outcomes (Ye & Xu, 2023). Emphasising the value of action research, involving all education stakeholders, this interactive type of learning brings far-reaching benefits. Hence, the next sections in this paper extend the discussion on the need to focus our attention on the development of high-quality education models that play a central role in sustainable development, the intrinsic rewards from investing in it, examining interdisciplinary strategies, varied teaching methods, and the significant effect of women's role in sustainability education (Kamphambale et al., 2022).

Sustainable Development: An Education Blueprint

Education plays a transformative role in sustainable development by addressing various social, economic, and environmental factors. It goes beyond imparting knowledge and fostering critical thinking skills that empower individuals to participate in shaping their communities and tackling pressing issues actively. By promoting active citizenship, education enables individuals to become well-informed and responsible members of society who contribute positively to change. Through comprehensive learning experiences, education equips individuals with the necessary tools to understand complex problems and develop innovative solutions. Additionally, it serves as a catalyst for socio-economic mobility by breaking the poverty cycle (Afriadi et al., 2022; Bourn & Soysal, 2021).

Education is a catalyst for positive change that goes beyond mere skill and knowledge acquisition. Access to quality education empowers individuals to pursue better employment prospects, thereby enhancing their overall quality of life. Furthermore, education is pivotal in cultivating global awareness by expanding one's perspectives and advocating values, such as understanding, accepting, and appreciating different cultures. This inclusive mindset is essential for addressing global challenges such as climate change, poverty, inequality, and conflict. By prioritising equity and inclusivity in educational endeavours, society can foster sustainable progress encompassing both social well-being and environmental preservation, which has the potential to encourage behavioural changes in people who can impact and drive changes in the institutions to which they adhere (Motevalli et al., 2022; Schofer et al., 2021). The significance of HEIs in driving change was highlighted by Tilbury (2011), who explains that the journey began in the early 1970s with the Stockholm Conference on the Human Environment in Sweden in 1972, which was the first event to officially recognise the role of higher education in advancing sustainable development at an international level. This event was followed by documents such as the Belgrade Charter in 1975, Tbilisi Proclamation in 1977, and the United Nations Conference on Environment and Development in 1992. All the outlined events, plus many more, acknowledged the significance of higher education in moving the sustainability agenda forward (Jung & Dos Santos, 2022; Singh, 2022).

The United Nations established the Millennium Development Goals (MDGs) to improve people's lives worldwide by 2015. The MDGs were conceived as a response to growing concerns about global poverty, inequality, and underdevelopment. In 1996, the United Nations Development Programme (UNDP) launched the Human Development Report, which

emphasised the importance of education, health, and gender equality in promoting human development. This report helped shape the global development agenda and provided a framework for MDGs (Hickmann et al., 2023; Somavia, 2007). The importance of the sustainability agenda was reinforced in 2000, when world leaders met at the United Nations Millennium Summit in New York, where they adopted the Millennium Declaration, a statement of principles and values to promote peace, security, and development. They acknowledged that the Millennium Declaration called for the creation of a set of specific, measurable goals for improving human well-being that would later become the MDGs. The MDGs were widely recognised as an essential step forward in the global fight against poverty and underdevelopment; they provided a framework for international cooperation and helped focus attention on the world's most pressing social and economic issues. While progress has been made towards achieving many MDGs, some goals, such as environmental sustainability and gender equality, were not fully achieved by the target year of 2015 (Centre for International Institutions Research (CIIR), 2020; Information, 2000). As a result, SDGs were adopted as a new set of development goals in 2015. This new agenda was built on the progress made under the MDGs and aimed to address the unfinished business of the previous goals while also addressing emerging challenges such as climate change and inequality. Some consider the new agenda to be an ambitious proposition with too many goals, 17 complemented by 169 target indicators that, at present the world economies are failing to achieve as we are facing growing levels of conflict, increasing levels of inequality within and across countries, severe challenges concerning equity, diversity and inclusion, the accentuation of climate change degradation, the dominance of fossil fuels as the global energy source, consumption patterns that are fuelled by the market driven economy to name a few of the ongoing challenges (Halkos & Gkampoura, 2021; Langford, 2016).

The concept of education for sustainable development (ESD) has evolved and is now associated with various interpretations and meanings. Climate change is a significant environmental issue that dominates sustainability agendas. Yet, this is not the only concern, as there are also worries related to poverty and inequality. Addressing climate change is intertwined with environmental, social, and economic issues, and neglecting these challenges can hinder sustainability efforts. Communities without access to clean water and sanitation may face health risks and struggle to support sustainable development (Adamopoulou et al., 2023; Gamage et al., 2022). Furthermore, the economic aspect of sustainability entails ensuring that economic progress and development are sustainable over the long term, as

opposed to being propelled by profit-driven goals in the short term that put significant pressures on scarce resources as their continuous exploitation can lead to depletion. Therefore, fair commerce, responsible business, impact investments, knowledge exchange, collaboration and cooperation across nations, and the egalitarian distribution of resources are a few examples of the factors that fall under this category that need to be seriously considered as part of a more complex situation (Csath, 2020; Hodge et al., 2021; Phatak, 2009).

We argue that to manage and address ongoing sustainability challenges, transformative and transdisciplinary education should be considered, as they can contribute to meaningful changes in sustainable development. It is required to push learners outside theoretical limits and provide a more integrated and practical academic experience, in parallel to instilling values, beliefs, and habits necessary to create critical thinking, entrepreneurial and leadership mindsets by empowering them to question and change their societal structures, beliefs, and values (Afriadi et al., 2022; Boström et al., 2018). Transformative education aims to equip learners with the tools needed to drive change in their lives and to support their communities, that should be considered in the context of cohesive social systems. In larger communities, transformative education seeks to equip learners to critically scrutinise, examine, and challenge dominant power structures that promote inequity and disparity. This stresses the importance of learners engaging in introspective, reflective, and creative practices that enable them to become change agents in their lives and communities (Zhang, 2022). Furthermore, transformative education questions the status quo and seeks radical change by allowing marginalised groups to engage in decision-making that impacts their lives. This helps address the root causes of society's problems rather than simply treating symptoms. Empowering learners and communities to challenge the systems and structures perpetuating inequality and lack of quality education can help develop a more sustainable future (Washburn, 2021).

Navigating the Path to Sustainability: The Indispensable Potential of Education

For learning to be successful, there must be a stable and tested body of knowledge that can be used to address precisely defined challenges. Because of this, ESD moves the emphasis from "*What should be known?*" to "*What should one be able to do?*" which is often referred to as a shift from "input" to "output" (Riess et al., 2022; Sascha Dannenberg et al., 2016). Therefore, ESD is conceived as an integrative that constitutes the ecological, economic and socio-cultural dimensions of a problem and considers the interlacing of global, regional and local structures and processes. It is based on a long-term view and considers the present from

the perspective of the future from a more holistic and integrated lens than needs to move beyond economic and political agendas (Handayani, 2019; Vakleva & Georgieva, 2022).

According to Dotson et al. (2020), education is linked to stronger governments, higher gross domestic product (GDP) per capita, and lower poverty rates. It also equips individuals with a wide range of competent skills that contribute to national and international development, making them highly employable due to their extensive repertoire of soft skills and business acumen (McGunagle & Zizka, 2020). Education is vital for shaping the workforce, driving economic growth and, more recently, fostering sustainable development. As some practical examples, research studies have shown that educating farmers on climate-smart agriculture leads to higher yields and better climate adaptation. In the service sector, eco-friendly farming practices can increase crop yield. Educating women leads to better family systems that benefit their children. Education and training can enhance employee performance and customer satisfaction while reskilling and upskilling employees can boost productivity and competitiveness in manufacturing. Undoubtedly, a well-educated population is essential for achieving knowledgeable and sustainable growth, as education plays a direct role in sustainable development through implementation, decision-making, and quality of life (Diaz et al., 2023; Matere et al., 2023; Thilakarathne et al., 2023). Furthermore, a country's education system can either help or hinder sustainable development efforts. Countries with high unemployment and large numbers of unskilled workers face limited economic growth. They may rely on imports, which can lead to resource exploitation, a shift from self-sufficiency to cash crop farming, accentuation of corruption, and human rights violations, and income imbalances. Educated individuals are important for good decision-making to drive positive societal, economic, and environmental impact. As educational levels increase, more sustainable options tend to become available (Latief et al., 2022; Siddiquee & Rahman, 2020).

Women Education: A Pathway to Sustainable Development

Education for women is critical in shaping women's roles within the economy, society, and the environment, thereby contributing to sustainable development and progress. Education can significantly impact a woman's life by providing a higher status and a sense of efficacy. Looking more closely at the specific impacts, which women can have on sustainable development, several factors emerge. For example, education for empowering women can be observed in their financial autonomy. Educated women are more inclined to engage in paid work, leading to higher earnings and savings that positively impact the economic growth of

their countries (Kulal et al., 2023) Agreeably, Kamdjou's (2023) study established a statistically significant positive correlation between education and investment returns across Africa, Asia, Europe, and the United States, with an average rate of 12%. The study revealed that women generate higher returns than men, with rates between 10.6% and 10.1%.

Beyond economic contributions, educated women have substantive effects on health and well-being, which are vital components of social sustainability. Martins (1995) indicates that the trend of educated women having fewer children directly impacts sustainability, particularly in terms of population control and resource utilisation, as fertility rates and levels of education have an inverse relationship. When fertility rates decrease, population growth slows, which leads to less pressure on natural resources and support systems, thus promoting sustainability. Educated women also tend to prioritise their offspring's quality rather than quantity. They invest in better education and healthcare for their children, thus creating a healthier and more educated generation. This can create a cycle of educated citizens who better understand and commit to sustainable practices. Furthermore, as economies develop, fewer children per household can potentially decrease families' carbon footprints, as fewer resources are consumed, and less waste produced (Bora et al., 2023; Kumar & Stauvermann, 2019). Moreover, women with higher levels of education are more likely to provide their children and families with clean water, proper sanitation facilities, and a clean environment for growth and thriving, as well as access healthcare and advocate for themselves and their families. Education can also improve financial literacy, enabling individuals to make sound economic choices and actively engage in the economy. Furthermore, higher education levels are associated with lower infant mortality rates, as women are more likely to seek medical assistance for their children (Cao et al., 2023; Reena, 2023).

In the professional sphere, educated women in the science, technology, engineering and mathematics (STEM) fields are key drivers of sustainable development. For instance, in biotechnology, Shetty et al. (2011) research improved the healthcare sector by replacing harmful technologies with greener biotechnological alternatives. Women's education also affects familial decisions, with higher education levels leading to delayed childbearing and greater control over reproductive health (Jackson, 2019; Qasmi, 2020). Women's education is fundamental to gender equality as it enables them to attain leadership positions and fair compensation. A well-educated female population is crucial for breaking down the barriers that hinder women's progress towards reaching their full potential.

To ensure women's socio-economic and political integration and active participation, it is essential to provide equal opportunities through quality education, which can help them succeed in the workplace, community, and politics by becoming valuable members of society. However, women still face challenges at the global level. In underdeveloped regions, social norms, poor infrastructure, patriarchal societies, family traditions, and economic constraints pose significant limitations to women who are not considered equal citizens. Domestic violence, the glass ceiling, and wage disparities often shape their role within even the world's most developed economies. Policies and programs must address these challenges by eliminating barriers to access, and by fostering an environment conducive to women's educational attainment. This will ensure that women can participate in society and contribute to the economy, whilst promoting gender equality and being respected and valued global citizens (Ganjikunta & Kadavakollu, 2022; Mbukanma & Strydom, 2022).

Pedagogies for a Better Future

Bernstein (2000) defines pedagogy as an ongoing process whereby somebody acquires new forms or improves existing forms of conduct, knowledge, practice, and standards from something deemed to be an appropriate provider and judge. The UN Decade of Education for Sustainable Development framework emphasises high-quality education for sustainable development, which calls for a multimethod strategy through various educational methods. Pedagogy has been interpreted differently throughout history based on educational fields, regions, and languages (Esd Section, 2007; Lilian, 2022). Pedagogy emerges as critical to drive the sustainability agenda as it examines both the "how" and "why" of teaching, influencing how educators perceive teaching and the learning rationale. Pedagogy should be viewed as a political practice that seeks to empower learners to think critically about their social and political environment. By enabling critical thinking and questioning the status quo; learners become active and engaged members of society by developing capacities for critical thinking, creativity, and social responsibility to reduce practices that reinforce inequality, conformity, and obedience (Silva, 2021).

The importance of an innovative and student-centred approach to education aims to prioritise the needs and interests of the individual learner and create an environment in which learners can take an active role. We argue that learners need to take a proactive role while engaging with creative and critical thinking. Engaging with learners makes it possible to nurture a process that encourages them to become self-regulated and autonomous learners. This

approach recognises that learners have different learning styles, interests, and abilities and seeks to tailor instruction to meet the specific needs of each learner (Rögele et al., 2022; Tang, 2023). Ujeyo & Najjuma (2022) suggest that new pedagogical approaches can improve learners' sustainable development education. To ensure the success of such approaches, it is crucial to carefully consider both the target audience and the practicalities of implementing the strategy because it requires taking into account factors such as the needs of learners and teachers and the learning environment that are significantly constraint to the availability of resources that could take into consideration individual learning needs.

Using various teaching strategies is beneficial because HEIs are home to a wide range of learners with different characteristics such as gender, race, socio-economic status, or ethnicity. This is beneficial, but also essential, as having diverse approaches are needed if we consider the diversity of learners, enabling teachers to have the opportunity to utilise and even develop their own unique learning processes and learning environments (Goering et al., 2022). Furthermore, the learners' capacity for learning and reasoning can increase if their teachers nurture the co-creation and collaboration of the learning process. In this context, using diverse pedagogical approaches to support learners' learning for ESD means that teachers must be capable of using a range of methods, such as experiential learning, project-based learning, and inquiry-based learning. Otherwise, the teaching and learning processes would be minimal if it does not offer a range of learning experiences in which learners can engage with a topic in various ways. Yet, pressure is put on teachers, as they are responsible for finding alternative ways that work best for learners when they must simultaneously focus on their discipline-specific requirements to develop additional skills within a resource constraint environment that is subject to educational institutions limited budgets and educational models that are commodified (Bourn & Soysal, 2021; Tillmanns, 2020).

Empowering learners to develop their unique learning processes is particularly relevant in ESD, where learners are encouraged to become critical thinkers and active agents of change, providing opportunities to explore and develop their learning processes (Algurén, 2021). Nations have been allowing inclusive educational models and curricula in HEIs that are available to learners from all backgrounds. However, research suggests that more work is needed to eliminate gaps in opportunity and achievement among the variety of learners populations (Bailey et al., 2015). Vass et al. (2019) indicate that incorporating indigenous knowledge into the curriculum can aid in fostering a more inclusive learning environment

and meet indigenous learners' requirements. Creating a more inclusive campus culture can also help improve learners' experiences and increase awareness of adopting inclusive educational practices critical to the success of equity, diversity and inclusion (McDuff et al., 2020). Furthermore, incorporating diverse perspectives into the curriculum has been shown to promote inclusion and address challenges faced by underrepresented groups of learners. By providing educational opportunities representing various cultures and backgrounds, we can create an environment where all learners feel valued and included in their learning experiences (Sengupta et al., 2020; Wilinkiewicz-Górniak, 2019).

Additionally, inclusive pedagogies tailored to learner abilities can significantly improve the success rates of learners from disadvantaged backgrounds. Moreover, adopting universally designed curricula for learning allows us to accommodate different learning styles and enhance outcomes for all learners, fostering inclusivity throughout our educational system. It is crucial to recognise that learners from ethnic minority backgrounds may feel marginalised when enrolled in classes that predominantly focus on Western knowledge and perspectives. Therefore, to provide equitable education, we must ensure the representation of diverse cultural viewpoints across the curriculum (Lin & Kennette, 2022; McDuff et al., 2020).

Embedding Sustainability into the Curriculum

One of the most urgent issues in higher education is incorporating sustainable teaching practices, fostering learners engagement, and connecting learning and its applications to real-world problems. Education and the development of learners' potential as intellectuals and leaders are two potential ways to bring about the necessary change and significantly influence the path to a more sustainable future (Gamage et al., 2022; Sidiropoulos, 2022).

Higher education institutions need to embrace innovative teaching methods to empower and equip graduates to positively impact the world by addressing sustainability challenges. Assignments need to move away from simply assimilating information provided by teachers and shift towards fostering collaboration, knowledge exchange, critical thinking, creativity, research and curiosity through applied skills. This approach acknowledges the complexity of sustainability issues and avoids oversimplifying binary types of responses that lead towards what are identified as right or wrong responses. By encouraging learners to think critically and consider trade-offs, HEIs can nurture a deeper understanding of sustainable development and its associated challenges (Krause-Steger & Roski, 2019; Sprain & Timpson, 2012).

In educating for sustainability, learners should be taught how to be agents of change who address problems in the real world by conducting investigations that depend on multiple sources of knowledge and go beyond facts as the primary source of knowledge (Leifler & Dahlin, 2020). To better prepare learners for future difficulties, higher education should prioritise the cultivation of skills necessary for sustainable development to pursue the path of sustainability because education should not stop at merely imparting knowledge; instead, it should also give learners opportunities to cooperate and understand other people's perspectives and worldviews. This can facilitate the need to move further to integrate skills that enable learners to reflect, think analytically and creatively, and take positive action as they become proactive and take responsibility for their learning process (Khahro & Javed, 2022; Zhang, 2022). According to Ujeyo & Najjumav, (2022), some higher education programmes lack sufficient thoughtful design to investigate ways to create a sustainable world. Most existing curricula are centred on the particular knowledge and skills utilised in a given disciplinary field or profession and have been created to provide learners with an increasingly narrow grasp of disciplines, professions, and jobs. In any cases, where sustainability is evident in the curricular, it seems to be limited to sustainability from the environmental and economic perspective only (Bataeineh & Aga, 2022).

Therefore, Bengoechea & Bell (2022) urge HEIs to change evolve faster than society by incorporating sustainability, rules, standards, values and attitudes, and by setting staff objectives to support society's changes in the 21st century. To enable education models that are not limited to the needs and demands of the labour market or focused on the climate change problem, whilst being a pressing problem and a major challenge, is not the only area of concern as we reflect on the need to transition towards different economic models less focused on unchecked growth. A more holistic approach is needed! In response, more and more universities are embedding the SDGs in their curricula (Adams et al., 2023; Lemarchand et al., 2022, 2023; Zguir et al., 2021) and national governments are enshrining, and iterating improvements to education policies through the apparatus of their relevant public sector bodies to fulfil the ideals of SDG 4 (e.g., Fiselier et al., 2018, Government of Ireland, 2023; HAQAA Initiative, 2018). A seismic change is needed, however, to curtail the inertia behind the legacy paradigms of current educational system and its subservient role in business agendas and objectives is needed (Benge et al., 2020; Leifler & Dahlin, 2020).

Conclusion

Education is critical in attaining the UN 2030 Agenda for Sustainable Development (Sachs et al., 2019). An absence of educational accessibility can impede the attainment. We argue that it is imperative to consider our decisions' future effects and make concerted efforts to mitigate their harmful impacts. Learners, learning objectives and implementation strategies influence choice of pedagogy. Whilst education enables learners and communities to combat inequalities, its sustainability impact can be limited, if it does not use appropriate teaching, learning, assessment and research methodologies. The literature suggests that HEIs may not always fulfil commitments to inclusion, diversity, and equality. For example, ethnic minority learners have traditionally faced obstacles to engaging in higher education, which restricts their future development and limits their leadership potential. To address this, we argue that researchers and educators need to critically examine and challenge the ways in which neoliberal policies impact educational practices, including market-driven reforms that have led to the commodification of education and the marginalisation of some learner groups.

Education can empower learners and communities to challenge inequalities. Hence, it is crucial to consider economic and social disparities in policymaking. Infrastructure that is accessible to all learners from different backgrounds is necessary for quality education. Promoting access to education is critical to addressing disparities between the Global North and Global South. Improving inclusivity in teaching methodologies and administrative strategies for ESD is essential. Yet, to drive meaningful change, we must understand how inclusivity is integrated in education strategies and evaluate current teaching methods to integrate ESD. This will enhance ESD's efficiency and effectiveness and equip learners with the necessary skills and awareness for a sustainable future.

Finally, we can infer that there is still an unmet need to address global disparities, especially in women's education, and more studies are needed to compare pedagogical practices in both developed and less-developed countries and to adapt objectives and implementation strategies to different contexts. HEIs in less-developed economies may struggle with inclusivity, diversity, and equality, and learners from ethnic minority backgrounds often face barriers to success and engagement in higher education, thereby limiting their progress. For this reason, further studies examining global practices and analysing the impact of educational development at the global level can provide a comprehensive understanding of our main challenges as we attempt to develop a sustainable global educational environment.

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