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WHY DO WE NEED THE ECOSPIRITUAL PEDAGOGY IN SUSTAINABILITY EDUCATION?

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RESEARCH ARTICLE

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Abstract

In light of the escalating environmental crises, the integration of education and sustainability has become crucial for fostering awareness and action. Sustainability Education provides individuals of all ages with the knowledge, skills, values, and capacity to address challenges such as climate change, biodiversity depletion, resource overconsumption, and inequality that affect the welfare of humanity and the Earth. Eco spirituality represents the spiritual bond between humanity and nature. Eco spiritual pedagogy which is mostly absent from sustainability education can significantly strengthen the foundation of sustainability education. Higher education students are responsible citizens and vital contributors to a nation's prosperity. This paper demonstrates the significance of incorporating Eco spiritual pedagogy into the sustainability education of higher education students.

Keywords: Environmental crises, sustainability education, Eco spirituality, pedagogy, higher education

Introduction

The ongoing climate emergency and other environmental sustainability challenges result from human actions. The cumulative actions of humanity have transformed the earth's ecosystems to the point that our survival is jeopardised. The transformation is increasingly rapid, and challenging to reverse each day (UNESCO, 2020). The International Panel on Climate Change (IPCC) cautions that to limit global warming to 1.5°C by the century's end, as opposed to the disastrous 2°C scenario, we require fast, extensive, and profound transformations in all areas of society (IPCC, 2018). As our world approaches ecological collapse and the irreversible threshold of climate change, sustainability has emerged as a critical concern. To address the issue of sustainability, it is essential to first enquire: who or what is being sustained? The 2030 Agenda for Sustainable Development, ratified by all United Nations Member States in 2015, offers a collective framework for peace and prosperity for humanity and the planet, both presently and in the future. The 17 Sustainable Development Goals (SDGs) provide a critical call to action for all nations, both developed and developing, within a global partnership. They acknowledge that eradicating poverty and other forms of deprivation must be integrated with initiatives that enhance health and education, diminish inequality, and stimulate economic growth, all while addressing climate change and striving to conserve our oceans and forests.

The students' progressively urban and sheltered lifestyle alienates them from nature, resulting in diminished opportunities to experience and comprehend the natural world and its mechanisms. Orr (1999) articulates that the Western education system, which has supplanted indigenous educational methods globally, predominantly equips students for urban living and reliance on fossil fuels and international commerce. Children are instructed from a young age on how to compete with one another rather than how to collaborate and thrive in a sustainable society. Education for sustainable development is vital as it significantly influences environmental policies and practices that foster ecosystem conservation and resource utilisation (Van Poeck & Vandenabeele, 2012). The nascent transdisciplinary field of Education for Sustainability (EfS), grounded in the natural and social sciences, is emerging across all educational sectors in response to global ecological crises. A primary objective of Education for Sustainability (EfS) is to cultivate an ethos of environmental stewardship regarding life on Earth. Fostering inner awareness as a method of environmental exploration is crucial for achieving meaningful, comprehensive, and effective sustainability education. It recognises essential relationships between the self and the world while facilitating the development of skills required to address environmental threats in ecologically conscious, socially equitable, and economically sustainable manners.

Sustainability Education, commonly termed Education for Sustainable Development (ESD), is perceived as essential for advancing all global development objectives. It instructs individuals to make informed choices and take action, both independently and collectively, to transform society and safeguard the earth. It provides individuals of all ages with the

information, skills, values, and capacity to address challenges like as climate change, biodiversity depletion, resource overconsumption, and inequality that affect the welfare of humanity and the planet (UNESCO, 2024). Since 1992, UNESCO has advocated for Education for Sustainable Development (ESD). It directed the UN Decade for Education for Sustainable Development from 2005 to 2014 (UNESCO, 2017). ESD for 2030 emphasises education's pivotal role in attaining the Sustainable Development Goals (UNESCO, 2020). A fundamental aspect of ESD for 2030 is the enhancement of transformative actions among learners. These transformative measures encompass the prioritisation of critical thinking, problem-solving, and collaborative strategies to facilitate sustainable solutions (UNESCO, 2020). The transformative acts can gain momentum and efficacy through the use of ecospiritual pedagogy in sustainability education. Sustainability education necessitates an ecospiritual viewpoint aimed at attaining environmentally sustainable ideals, policies, and behaviours. Orr (2005) contends that a spiritual consciousness of our connection with Earth enables us to alter our beliefs and cognition to harmonise with Nature's wisdom and constraints.

The spiritual viewpoint on nature contrasts with the instrumental perspective which views nature just as a resource for humancentric purposes. This cost-benefit analysis contradicts a spiritual viewpoint on nature, as decisions about its conservation or use are not grounded in logical cost-benefit assessments but are instead shaped by fundamental moral beliefs (Skitka et al., 2005, 2021). The exploration of spiritual essence in nature commenced as a formal discourse in the 1980s, during a time of upheaval in both the environmental movement and global faiths. The origins of this can be ascribed to various philosophical viewpoints, including Spinoza's pantheism, Romantic Naturphilosophie, and the works of Henry David Thoreau and George Perkins Marsh. Prominent figures include Mahatma Gandhi, Rudolf Steiner, and Carl Gustav Jung significantly advanced Eco spirituality (Choné, 2017). Proponents of Eco spirituality originate from many backgrounds yet share fundamental principles that underscore the necessity of reinstating a feeling of sanctity in our relationship with the environment and perceiving the world as a living organism. This entrenched conviction, often rooted in personal experiences, encompasses the appreciation of nature, practical knowledge, and a moral commitment to preserving the environment and the planet as a whole. Suganthi (2019) defines ecospirituality as the discipline of reverently and carefully engaging with the environment while adhering to its limits. This definition includes experiencing unity with the universe, valuing the environment, recognising the potential consequences of disrupting ecological balance, understanding ethical considerations, protecting and preserving nature, and appreciating the marvel of understanding the ecosystem. In his 2015 Encyclical "Laudato Si," Pope Francis explores the growing acknowledgement of humanity's ethical obligation to foster a deeper respect for the environment and nature. Eco spirituality promotes ecological transformation through a shift in mindset, the adoption of personal practices, and engagement in social and institutional actions, all aimed at safeguarding our planet (De Diego-Cordero, 2024). It is essential in promoting the transition to environmentally conscious societies by providing perspectives and ethical principles that inspire individuals to pursue sustainability.

Eco spirituality can be defined by five principles: tending, dwelling, reverence, connectivity, and sentience (Lincoln, 2000). Tending is a multifaceted component of connection, involving self-care to enable the caring of others. Tending refers to the act of nurturing, caring for, and actively engaging with the world to derive purpose and fulfilment in life. Josselson (1992) characterises tending as an active component of connectivity. Dwelling is the coexistence with both the tangible and intangible facets of existence. Schuster (1992) defines dwelling as a mode of living which entails nurturing and honouring the sanctity of individuals, the environment, and the profound aspects of human existence within certain temporal and spatial contexts. The notion of dwelling encompasses the processes of assessing, evaluating, contemplating, reflecting, concentrating, refining one's perception, and maintaining awareness. The existence of harmony and balance in both internal and external perceptions of the world foster a sense of dwelling. The condition of harmony is enhanced when individuals actively support and engage in decisions and initiatives that foster tranquilly, both within themselves and in their external environment. Reverence is a profound and tangible sentiment of respect and appreciation for the sacred and awe-inspiring, grounded in the recognition of humanity's intrinsic connection to the world. This path of reverence involves cultivating deep admiration and regard while undertaking efforts to restore and enhance oneself, others, and the environment. Eco spiritual reverence fosters the restoration and equilibrium of the self, others, and the environment. Connectedness refers to Eco spiritual experiences, defined by an intrinsic bond with the cosmos and the awareness that the profound mystery of existence pervades every element of the universe. Sentience refers to the condition of possessing knowledge or awareness. Cummings (1991) posits that humans inhabit a wondrous existence within an enchanting cosmos. This astonishment can be perceived and articulated through the essence of sentience.

Eco spirituality, which is predominantly absent from sustainability education frameworks, might offer a cohesive basis for educators and students to redefine human relationship with Earth and envision a sustainable future. This paper demonstrates the significance of incorporating Eco spirituality pedagogy within the sustainability education framework of higher education.

Dhungana & Neupane (2021) proposed that an Eco spiritual pedagogy may encompass three fundamental components for integration. Initially, it is imperative to integrate spiritual essence into teacher education and all subject curricula, enabling learners to transcend tamas, rajas, and sattva gunas in their quest for understanding. Secondly, pedagogical practice must address the tripartite relationship of body, mind, and soul to cultivate virtuous conduct in learners. Karma yoga, bhakti yoga, and jnana yoga serve as frameworks for establishing a relational value system between human and non-human entities. The third concentration is to conduct educational programs that integrate spiritual dimensions within an ecological framework.

Based on the available studies of sustainability education, concept and principles of Eco spirituality, and the Eco spiritual pedagogy, the author of this article wants to put stress on the value-based approach, and reflective practices to justify the importance of ecospiritual pedagogy in sustainability education at higher education level.

Value-based approach: The 'we feeling'

The National Education Policy (2020) of India mandates that universities and colleges implement a compulsory core subject on environmental studies for all undergraduate programs, including general engineering, medicine, architecture, pharmacy, and management, as per the University Grants Commission (UGC) directives issued under the guidance of the Ministry of Education. The UGC states that the new environmental education curriculum is multidisciplinary, covering topics such as climate change, sustainable development, conservation and management of biological resources and biodiversity, pollution, sanitation, waste management, and the protection of forests and wildlife (Niazi, 2023). However, what is lacking here is the acknowledgement of the interdependence between humans and nature. The realisation and recognition of this connectivity can be expressed through Eco spirituality. Eco spiritual awareness, and practices can foster a sense of collective identity. This emotional connection is essential for environmental sustainability.

The Chipko Movement is regarded by many as India's inaugural genuine environmentalist movement. The inaugural Chipko movement occurred on 24 April 1973 in the Chamoli district, where the residents of Mandai, under the leadership of Chandi Prasad Bhatt and the Dasholi Gramme Swarajya Mandai (DGSM), thwarted the Allahabad-based sports goods firm 'Symonds' from cutting down ash trees. Following the initial protest in Tehri Garhwal, Chipko activists, spearheaded by Sunderlal Bahuguna, commenced organising locals to resist deforestation in the Henwal valley in 1977. In December 1977, they engaged in direct action to safeguard trees. In the subsequent year, numerous volunteers, including women, were apprehended for protesting a forest auction in Narendranagar. Mitra (2012) asserts that the fight in Henwal marked the transformation of Chipko from an economic dispute to a conservation struggle. This struggle for environmental preservation, termed 'chipko,' originates from the concept of 'we feeling,' a fundamental principle of Eco spirituality.

The Narmada River traverses through the Indian states of Gujarat and Madhya Pradesh. A notable environmental movement in India is the Narmada Bachao Andolan. It is a campaign opposing the construction of many big dams across the Narmada River (Turanga, 2000). The Sardar Sarovar Dam in Gujarat is among the largest dams on this river and was a primary focal point of the movement. The Narmada Bachao Andolan has escalated its nonviolent opposition to the project, asserting that it will not benefit the populace but will instead devastate, degrade, and displace their means of livelihood. The stakeholders in this movement included local tribes, farmers, environmentalists, and human rights advocates. These individuals recognised the mutual existential crises of humanity and the environment surrounding the Narmada River. So, they came forward to resist the anthropocentric dams constructing activities for the sake of 'we feeling'.

Legend states that in 1485, Saint Guru Maharaja Jambheshwar established the Bishnoi sect of Hinduism in the Marwar district of Rajasthan, India (Sohel & Naz, 2024). The term "Bishnoi" originates from Hindi, where "Bish" means twenty and "Noi" means nine; it references the original 29 edicts of Guru Jambhoji, which prescribed a peaceful existence with nature amid the challenging climate of the Thar Desert (Ghai, 2024). Among these edicts, the following were particularly significant: "do not cut green trees" and "be compassionate towards all living beings." (Sohel & Naz, 2024). Jambhoji's teachings explicitly underscored the preservation of nature and wildlife, as folklore suggests that he endured devastating droughts in his earlier life, resulting in dire repercussions for both humans and animals. His rationale was that safeguarding trees will consequently protect the creatures and humans reliant on them. Adherents maintained these beliefs even during periods of distress, Approximately 350 years ago, the king of Jodhpur required timber to operate his lime kilns, utilised for constructing a new palace, and sought to cut down a grove of Khejari trees in a neighbouring village (Gadgil & Guha, 2012). In 1730, the king dispatched soldiers to the Bishnoi village of Khejarli with directives to fell numerous Khejri trees, revered in Bishnoi culture. Amrita Devi Bishnoi, a villager, along with her daughters, endeavoured to thwart the soldiers by embracing the trees. To avert the felling of their trees, the adjacent Bishnoi villagers emulated Amrita Devi and protected the Khejri trees in the vicinity. The army disregarded the people' entreaties, resulting in the deaths of 363 Bishnoi, including Amrita Devi and her daughters (Mukul, 2024). Upon learning about the atrocity, the Maharaja promptly ordered the cessation of the woodcutting activity and expressed remorse for the fatalities (Sohel, & Naz, 2024). The fundamental principles of Eco spirituality and the interconnection between humanity and nature are evident in the teachings and practices of the Bishnoi community.

These environmental movements and community practice proves that mere cost-benefit approach towards nature is not enough, but the empathetic and deep-rooted love towards nature can be more inclusive and more impactful for environmental sustainability. Some book chapters or some academic environmental projects are not enough to develop this 'we feeling'. We need the ecospiritual pedagogy throughout the journey of the higher education students. The higher education students are the responsible citizens and also the key players of the progress of any country. That's why we need to streamline our higher education students for environmental sustainability of our country. These students must assimilate Eco spiritual belief of 'we felling' i.e. the sacred interconnected between humans and the nature to strengthen the foundation of environmental sustainability education. So, how can we develop this 'we feeling' among higher education students? That has been discussed in the next section.

Reflection: The sacred practices

Forming a collective to establish and engage in rituals that commemorate seasonal changes and significant regional dates can foster a sense of belonging and connection to place; these Eco spiritual practices can motivate ongoing stewardship, moving beyond a utilitarian perspective of nature to promote a more relational understanding (Billet et al. 2023). Shinrin-yoku, translated as 'forest bathing,' originated in Japan in the 1980s and involves the integration of the senses through conscious practice within a forest setting. The Chinese character for 'mindfulness' consists of five components: eyes, ears, heart, mind, and undivided attention, which collectively illustrate the engagement with shinrin-yoku. Available studies on shinrin-yoku suggest that it may alleviate students' tension, anxiety, and other mental health issues while enhancing their psychological well-being. Nonetheless, forest bathing might also enhance their awareness of connectivity with nature.

Although no definitive criteria exist for engaging in shinrin-yoku, Buckler and Moore (n.d.) proposed many actions based on a synthesis of research from several sources, as outlined in the figure 1.

Initial 10 minutes

• Ambulate in silence while concentrating on normal respiration. This aids in tranquillizing the mind, organising thoughts, and acclimating to the temporal context of the forest environment. Concentrate on your movement dynamics and the coordinated functioning of your muscles.

Mindrulnes s

Exercise 1

• Concentrate on conscious respiration. Inhale while mentally articulating the word 'calm.' As you exhale, mentally articulate the word, 'relax.' Reiterate this a minimum of nine times. As you inhale, take note of the scents present. For the next ten minutes, maintain silence while concentrating on your breathing. Concentrate on the trail, shrubs, trees, foliage, distant views, and nearby details.

Next 10 minutes

•Maintain silence while concentrating on your breathing. Concentrate on the trail, shrubs, trees, foliage, distant views, and nearby details.

Minavulnes s

Exercise 2

• Open Awareness. Cease movement and concentrate on a single tree, observing its shape, the arrangement of its branches, the texture of its bark, and the form of its leaves. Broaden your viewpoint to consider the tree's position relative to its surrounding counterparts. Be cognisant of the thoughts, images, impressions, and emotions that arise.

Next 10 minutes

• Maintain silence while concentrating on your respiration. Concentrate on the auditory stimuli: the wind softly rustling the leaves, the melody of birdsong, and the sounds of movement in the underbrush.

Minarulnes

Exercise

•The pebble meditation assists in transforming abstract notions into tangible forms. A precise depiction of how to perform pebble meditation has been discussed by Castel and Buckler and in their book 'Psychology for Teachers' (2018).

Next 10 minutes

• Maintain silence while concentrating on your respiration. Simply exist in the now. Extend empathetic sentiments to acquaintances, including those you have encountered briefly, and thereafter broaden this to encompass the larger notion of humanity.

Figure 1: Suggested steps of Shinrin-yoku

(Source: Buckler, S., & Moore, H. (n.d.). Shinrin-Yoku: Enhancing mental health and wellbeing. https://my.chartered.college/research-hub/shinrin-yoku-enhancing-mental-health-and-wellbeing)

We can accommodate this shinrin-yoku practice in the Eco spiritual pedagogy. The step-by-step activities stated above can be incorporated in their outside classroom activities and also in some new value-added courses.

Kolb's experiential learning theory characterises learning as the process in which knowledge is generated through the transformation of experience. Knowledge arises from the synthesis of understanding and altering experience (Kolb, 1984). In ecospiritual pedagogy, experiential learning aids higher education students in cultivating awareness of their surrounding environment. The pupils would enhance his reflective and conceptual framework after being rooted in real-world experiences. Their production of knowledge should emerge from the framework of the symbiotic link between humans and nature.

Delaney & Barrere (2009) aimed to investigate the fundamental nature of Eco spirituality meditation experiences in adult English-speaking patients over 21 years of age with cardiovascular disease. Their Eco spirituality meditation comprises the subsequent steps:

- At first, start by locating a tranquil setting in one's surroundings that s/he considers restorative and where disturbances are unlikely. This can occur in various locations, including the backyard, garden, or while gazing out a window.
- Then, s/he should remain seated in silence and absorb the surrounding beauty for 3 to 5 minutes. Inhale and exhale at a regular pace while surveying the surroundings.
- After 3 to 5 minutes, s/he may either close the eyes or keep them open while calmly contemplating nature and its restorative elements or engaging in prayer. Reflect on the marvels of the world and their origins. Consider the smallest cell, as well as plants, animals, and trees, and their connections to humanity. Serenely convey appreciation for all of these elements.
- Engage in silent reflection or prayer in this therapeutic setting for 15 minutes.
- After that period, remain seated for 2 to 3 minutes before gradually returning to regular activities.

We can incorporate this Eco spirituality meditation form in the Eco spiritual pedagogy of higher education students.

Students in higher education must participate in the Eco spiritual interpretation of diverse literature. The writings of Rabindranath Tagore exhibit profound Eco spiritual themes. In Tagore's oeuvre, humanity and the natural world exist in harmonious coexistence; humans are depicted as modest components of nature rather than sovereigns. Banerjee (1961) asserted that Tagore's nature poems transcend mere descriptions of the striking and beautiful aspects of Nature. Instead, it embodies the essence of a ubiquitous spirit. Eco spiritual pedagogy should motivate students to discover the expression of spirit inside texts. Numerous authors, including Tagore, have produced works that are enriched by the portrayal of exquisite nature, the interdependence of humanity and nature, environmental crises, and the sanctity of the natural world. Through Eco spiritual pedagogy, we must inspire students to investigate the Eco spiritual essences of these books. These strategies can enhance the foundation of sustainability education.

Conclusion

The UN SDG progress report (2024) reveals that in the realm of climate and biodiversity, although industrialised countries have achieved some reductions in greenhouse gas emissions, greenhouse gas concentrations reached unprecedented levels in 2022, with real-time data from 2023 showing a persistent increase. This report indicates that carbon dioxide levels have escalated to 150% above pre-industrial levels. This report reveals that the state funding for oil, coal, and gas production and consumption more than doubled from 2021 to 2022 and tripled since 2015, obstructing progress towards a net-zero transition. The specific report indicates that ocean acidification is increasing and will continue if CO2 emissions rise. This report alerts that the risk of species extinction is escalating, evidenced by a 12% decrease in the overall Red List Index since 1993. Ceballos et al. (2017) previously indicated that around 200 vertebrate species have become extinct in the past century. Numerous avian populations in the USA and the UK are experiencing fast decline (Rosenberg et al. 2019). Documentation from Europe, Asia, and the USA details a widespread loss of insects. Consequently, agriculture is nearing a crisis, with the decline of pollinators exacerbating issues related to soil, water, and land degradation and contamination (Kónya & Haigh, 2021).

Sustainability education is crucial in facilitating the transition to a more sustainable future. Conventional means of delivering sustainability or environmental education may be inadequate in generating essential awareness and facilitating a significant change in viewpoints. To effectively create change, a departure from conventional practices is necessary – an introduction of innovative approaches that involve students more profoundly. This engagement seeks to provide them with both knowledge and the crucial skills necessary to address the numerous challenges confronting our environment and ecosystems, including pollution, deforestation, climate change, plastic waste, biodiversity loss, and resource depletion. Nonetheless, the information and skills generated by sustainability education will be inadequate without a fundamental awareness, and practice of Eco spirituality. Ecospiritual awareness, and practice possess substantial potential to create an effective sustainability education framework, which can significantly contribute to addressing contemporary environmental challenges.

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