Chapter 5 Green Education to Promote Green Technological Skills

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ABSTRACT

The term "Green" instantly sparks green scenery of nature relating to plants, lush fields, forests, and all types of flora. This study is a requisite effort to harness green education enabled with green technological skills and concepts in the digital arena. It will cover the analysis of the necessities of green initiatives in the context of prevailing climate challenges, and eco-friendly opportunities presented with digital change, emphasize the vital role of digital literacy to meet the demands of the green skills job market, discuss the principles and methods of green education and offers proposals to integrate green skills in the curriculum, address obstacles in the integration of green education and technology with digital green innovation and recommend policy interventions and guidelines to develop green innovation education web.

INTRODUCTION

This is the fourth industrial revolution era based on digitalization, digital technology, tools, and transformation where all economic growth and social drivers merely depend on technological innovation. The upcoming era will be called the fifth industrial revolution, the green digital revolution, a merger of ecology, technology, sociology, science, math, and economics. The response to the evolutionary green revolution becomes more dynamic to encompass and develop the moderation strategies for green technology and setting for a green future. Modern online technologies have more eco-friendly operations, in

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structuring the perfect bond between sustainable practices and digital green revolution. The education system works as a catalyst to make changes in society. The mode of incorporation of eco-sustainable measures with green expertise into educational programs is an emergent trend in academic circles to foster eco-vision and green skills among educators and learners for green and sustainable preparations. Education as a service sector has the potential to transform the education process (teaching-learning) with eco-friendly tools, techniques, policies, and strategies to develop the green education model and conducive environment for children (Aithal & Rao, 2016). Green education is a diverse range of green initiatives, from early childhood to university education to provoke green efforts for a green future through educational policies, administrative tools, real-world base knowledge models, infrastructural settings, and dynamic engagements of the community. Green education, integrating green technological solutions and sustainable development practices as part of the educational curriculum, can adopt the established bond between man and nature. The purposes, theories, and skills of ecological education can be part of school syllabus by opting green curriculum to improve the learning and understanding attitude towards science and facilitate students to realize their responsibilities for environmental protection (Tan, 2004). Green innovation holds the node of digital technology and green sustainability pursuing the ability and power of the digital revolution. The complexity of the situation demands multi-dimensional schemes that can condense the externalities of digital infrastructures as electronic wastes, and carbon capture as the prime objective while promoting sustainable decisions and green digital solutions. Green education grapples and accentuates the activities, initiatives, and practices in education for student awareness regarding environmental issues, climate change, global warming, glacier melting, water scarcity, tsunami, sea level rise, cloudburst, urban flooding, droughts, deforestation, natural resource depletion, smog, air quality, soil erosion, sustainable development programs, biodiversity, green energy, preservation, and conservation strategies. The dual challenges of intensifying climate threats on the globe and digital innovation, demand green education as a decisive force to shape the sustainable future landscape. The key objective of green education is to educate young minds to develop a learning attitude, drive a sense of responsibility, and train them with skills for mature actions to preserve a sustainable environment for green contribution and innovation in the digital arena. Environment and natural resource management courses, ecological informatics, climate justice debates, environment-related science exhibitions, green clubs, sustainable thematic projects, and reuse, reduce, and recycle projects can motivate thoughtful and critical thinking concerning the gravity of environmental and climate challenges. Green education is raising a sense of responsible adoption of nature and connection with natural fabric and has the intention to groom young people, educate educators, to develop a sense among the community, about environmental concerns for their contribution to a sustainable and green future. The evolving panorama of the digital era and the merger of the digital and green revolutions have surfaced with a novel front. As global voices are grappling with climate challenges, resource scarcity, and biodiversity loss, the importance of green novelty has been enunciated with low pitch. Although the digital revolution has greatly shaped climate actions by opening new avenues to promote, be aware, and engage in sustainable arrangements, however, this unprecedented urgency plea for the ropes and hopes from digital transformation to consider environmental perils at a rapid pace and through inventive technological smart solutions. The realization of this call requires a potential task force fostered with green skills and ample green education. Green skills are vital to foster green resilience, digital transition, and emerging trends in green labor markets. This chapter is an attempt to discover a synergetic bond among green revolution, green education, and green skills to drive shared development for a sustainable future along with digital transformative support.

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