

Embracing biodiversity: a perspective on transforming Engineering education for sustainable innovation

ABSTRACT

In a rapidly changing world marked by escalating environmental challenges, the imperative to integrate biodiversity knowledge into engineering education has never been more pressing. This perspective paper aims to explore the transformative potential of integrating biodiversity principles and practices into engineering curricula. Drawing upon interdisciplinary insights from environmental science, ecology, and engineering education, this paper advocates for a paradigm shift in engineering pedagogy to foster sustainable innovation. Through a lens of collaboration, creativity, and ethical stewardship, this paper explores how embracing biodiversity can empower engineers to address complex 21st-century challenges while nurturing a deeper connection between human ingenuity and the natural world. By illuminating the pathways to integrating biodiversity into engineering education, this paper aims to inspire educators, researchers, and practitioners to embark on a journey toward a more sustainable future.