

Research Article

Enhancing Urban Biodiversity Awareness and Conservation Through Nature Walk-Based Pedagogy

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ABSTRACT

Nature walks can be an effective pedagogical tool for exploring and understanding the urban biodiversity. Through observation-based pedagogy, students can learn about the biodiversity that surrounds them. This is effective in inculcating an understanding of the ecosystem, the intricate relationships between the organisms in an ecosystem, and their adaptations and interactions, thereby increasing environmental awareness. Their critical thinking, teamwork, and communication skills also improve through group-based activities such as nature walks. The study evaluated the effectiveness of Nature-based pedagogy in improving students' understanding of urban biodiversity. Three themed nature walk sessions were conducted for undergraduate students (N=173) focusing on entomological diversity, lepidopteran diversity, and pond ecosystem ecology. Each session included a lecture-based module, followed by a quiz and then a nature walk-based module, followed by a quiz. Students also recorded field observations and microscopic analysis of collected samples. Mean quiz score significantly improved after nature walk based module sessions. Students exhibited enhanced ability to identify insect orders, life stages, ecological interactions and pond biodiversity. Qualitative feedback reflected high engagement, improved conceptual clarity and appreciation for urban biodiversity. Nature-walk based pedagogy substantially improves conceptual understanding, field identification skills and environmental awareness. Integrating structured nature walk-based modules in Zoology and Life Sciences curricula can enhance experiential, inquiry-based learning and promote conservation-oriented attitudes among undergraduate students.

Key words: Nature walk, Pedagogy, Entomological diversity, Collaborative learning, Curriculum.

