自然與生活科技領域「臺灣水生植物」之多元 教材與融入環境教育教學應用初探

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摘要

本研究旨在初探臺灣水生植物之多元教材現況與瞭解臺灣水生植物應用於環境教育教學情形。資料蒐集主要透過文件、訪談與校園觀察,共有5位國小老師參與訪談,觀察場域為學校水域環境,以質性分析為主。研究結果分為二大類:(一)臺灣水生植物之多元教材現況:大致可歸納五類,並可納入三大領域,即文學教材(童話故事、報導文學、繪本、詩)、科學教材(科普)與生活教材(食譜)等;各類教材的量上仍舊十分不足,亟待開發。(二)臺灣水生植物融入環境教育之教學應用:多元教材在自然課可作為引起動機之教材;水生植物納入自然課、社會課、藝術與人文、特殊教育等領域是透過生態影片、戶外教學體驗、美術創作與特教課程調整等方式進行融入環境教育;外來種與原生種的介紹則可使用社會資源,例如邀請保育團體來校解說。

關鍵字: 水生植物、生物多樣性、多元教材、環境教育

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A Preliminarily Study on Multiple Teaching Materials of "Taiwan Aquatic Plants" in Science and Technology Domain and Applications in the Environmental Education

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Abstract

The purposes of this study were to explore the current situation of the multiple teaching materials of Taiwan aquatic plants, and to understand their applications in environmental education. Data included documents, interviews and observations in the campus. Five elementary school teachers participated in the interviews. The observation fields included the aquatic environments in their schools. Qualitative analysis was conducted mainly. The results were divided into two sections. The first was the current situation of the multiple teaching materials of Taiwan aquatic plants. They could be broadly classified into five categories and grouped into three major areas: literary texts (fairy tales, reportage, picture books and poems), science texts (popular science) and daily life texts (recipes). The multiple teaching materials of Taiwan aquatic plants were insufficient and needed to be further developed. The second section was the use of teaching materials in environmental education, which could be used to increase motivation in Science. The integration of aquatic plants into the environmental education in domains of Science, Social Courses, Art and Humanities and Special Education could be carried out through films about ecology, outdoor teaching experiences, artistic creation and the adjustment in special education courses. Social resources could be used to introduce exotic species and native species, for example, by inviting conservation groups to school to give explanations.

Keywords: aquatic plants, biodiversity, multiple teaching materials, environmental education